

THE REPRESENTATION OF MIGRANT STUDENTS IN SPECIAL EDUCATION  
IN THE STATE OF TEXAS

A Dissertation

by

NANCY PEÑA RAZO

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of  
DOCTOR OF PHILOSOPHY

August 2004

Major Subject: School Psychology

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August 2004

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## ABSTRACT

The Representation of Migrant Students in Special Education  
in the State of Texas. (August 2004)

Nancy Peña Razo, B.A., University of Notre Dame

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Migrant children are considered one of the most at-risk populations in the United States. They confront multiple obstacles of poverty, poor health, mobility, and limited English proficiency (LEP). These factors contribute to the difficulties that migrant children may encounter in the educational system. Once a migrant student is identified as having a disability, he/she faces problems not only because of his/her migratory lifestyle but also because of his/her disability. Little research has been conducted regarding migrant students with disabilities. Many questions remain unanswered. Some of the literature alludes to an underrepresentation of migrant students in special education, but no empirical research exists. The purpose of the study is two-fold. The first is to examine the extent of the migrant student population that is currently identified as having disabilities in the school districts across the state of Texas. The second purpose of the study is to examine the common characteristics of school districts that have a disproportionate representation of migrant students served by special education.

Data for the 2000-2001 school year was obtained from the Texas Education Agency (TEA) from their Public Education Information Management System (PEIMS) and the Program Analysis System (PAS). There were 223 districts included in the

sample. There were 71,656 migrant students in the sample with 9,078 migrant students receiving special education services.

Migrant students across the state of Texas were primarily Hispanic and economically disadvantaged. Forty five percent of all migrants were also LEP. Although 12% of the migrant population across the state received special education services during the 2000-2001 school year, further analysis demonstrated that there was a higher percentage of migrant students that received services under the Learning Disability category when compared to all students, excluding migrants. There were also a number of districts that had an overrepresentation of migrant students that received special education services, while others had an underrepresentation of migrant LEP students that received special education services. Overall, this study indicates that there is a disproportionate representation of migrant students that received special education services across the school districts of Texas.

## DEDICATION

This dissertation is dedicated to all migrant students, their families, and all of the educators and professionals that try to make a difference in their lives. We face many challenges because of our migrant lifestyle, but there are many components within our migrant lifestyle that make us stronger, such as our family. We must build upon these strengths in order to be resilient and overcome the challenges, but we must never forget who we are, where we come from, and where we have been, for it is these experiences that make us unique individuals.

## ACKNOWLEDGMENTS

This research study is very near and dear to my heart. I come from a migrant background, so I know first hand the difficulties that can arise in the education of migrant children. Beginning graduate work in school psychology peaked my interest in migrant students that receive special education services. Being able to mesh these two worlds together, my migrant and school psychology background, was like a dream come true for me. This research study was supported by a Graduate Student Mini-Grant from the Race and Ethnic Studies Institute of Texas A&M University.

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## CHAPTER I

### INTRODUCTION

Migrant children have been considered one of the most at-risk student populations in the United States for many years (Platt & Cranstron-Gingras, 1991). Over 35 years ago, Congress first passed legislation for migrant education under Title I, Part C of the *Elementary and Secondary Education Act of 1966 (ESEA)* (U.S. Department of Education, 2000c). The purpose of *ESEA* was to provide services for disadvantaged students, which encompass migrant students, in our schools. For migrant students in particular, *ESEA* established a migrant education program to provide services that would address the unique needs of this population (Wright, 1997). *ESEA* was reauthorized in 1994 under the *Improving America's Schools Act of 1994, Public Law 103-382* (U.S. House of Representatives, 1994) and yet again in the *No Child Left Behind Act of 2001, Public Law 107-110* (U.S. Department of Education, 2002).

One of the main changes in the 1994 amendments was that the length of eligibility was reduced from 6 years to 3 years (U.S. House of Representatives, 1994). This meant that a migrant student was eligible for services up to 3 years after the last time they migrated. This change was implemented so that recent migrant students would be the focus of services instead of students that were no longer migrating (Wright, 1997). The length of eligibility for migrant student services remains the same through the latest amendments. Funding for migrant programs prioritizes the help to those that

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This dissertation follows the style of *School Psychology Quarterly*.



are failing or at-risk for failing the state's educational standards and those migrant students that have a high frequency of moves (Wright, 1997).

Migrant students have been recognized as “disadvantaged students” because of the many barriers they face in their education. The federal government provides eligibility criteria for school districts across the country, including school districts in Texas, to use in identifying migrant children. While other children may have families that participate in agricultural work for a living, the key in identifying an eligible migrant child for services under the federal law is the issue of mobility. It is the mobility factor, along with other characteristics of migrant children that place them at-risk for facing barriers to their education.

Prior to *ESEA*, there were no federal programs available for migrant children that addressed any of their unique educational needs. As a result of the severe difficulties migrant children were having in education, the needs of migrant children and the barriers to education began coming to the forefront for the United States government. Various federal committees were formed to address these issues and offer solutions to these problems. Some of these suggestions resulted in legislation that created protection for migrant children as well as created special programs that help migrant children in their education. Many of these factors have remained the same for a long period of time.

### *Historical Context*

In the early 1900's, it was estimated that approximately 20% of the population in the United States had migrated away from their place of birth. This leads to the notion that migration was quite common. Researchers concluded that migration occurred during

this time period because of drought and the lack of employment across the United States (“Migrant Households,” 1939). People were more likely moving to find employment, but it was not known how many individuals were moving to find jobs specific to agriculture. It was estimated that between 6 and 16 million children traveled annually from school to school with their family because of migrant labor (Gaumnitz, 1945). Of course, this could be an underestimation because others claim that the census, which was used to count migrants, was often inaccurate since it was conducted during a time when there was no agricultural work (Anderson, 1932).

During this time period, migrants were quite a different population from what they are today. Much of the migrant population was comprised of immigrants that traveled across the United States in search of labor. Migration patterns were not consistent during this time and included both intrastate and interstate migration all across the United States (Cross, 1937). People would travel wherever they needed to travel in order to find a job. California was one of the most popular states for migrants because of its agriculture (Jamieson, 1942; Lovell, 1943). Agricultural work in California was done by people from diverse ethnicities. Mexicans primarily did this type of work from 1914 to 1934, but were especially dominating of migrant labor during the 1920s (Caughey, 1939). Other ethnic groups included Chinese, Filipino, and Hindu (Caughey, 1939). During the 1940s, the U.S. government passed an act to have a program that would recruit agricultural workers from other countries, such as Mexico and the West Indies, so this made Mexicans dominant in migrant labor once again (Mott, 1945). Although there

were many different ethnic groups that were migrant, there were often racial divisions among what types of jobs each group could perform (Jamieson, 1942).

For the most part, agricultural work was and is not a well paying job. Most agricultural workers lived in poverty (Caughey, 1939; Jamieson, 1942). As a result, many migrant workers lived and worked in unsanitary conditions (Cross, 1937). Many migrants set up camps known as “Hoover Towns” in places that did not provide ideal living conditions (Evans, 1942). An average yearly salary for a migrant family was between \$175 and \$300 (Evans, 1942). Many times older children assumed the “mother” role because they were expected to care for the younger children so that the parents could work. Often times, this prevented the children from attending school and resulted in children of agricultural workers having a limited education. For those few that attended school, they usually fell behind because of the short periods of time that they were in school (Evans, 1942).

Today, migrants are generally divided into two groups: those that travel within a state or from state to state, and those (the larger group) that travel from foreign countries or territories into the United States (Salend, Taylor, & Whittaker, 1998). Their migration patterns are more consistent, and they generally travel in three principal streams: the Eastern Stream, the Central Stream, and the Midwestern Stream. The actual number and location of migrants across the country fluctuates continually, but Texas is considered to have the second largest population of migrant students in the country, second to California (Kindler, 1995; Texas Education Agency [TEA], 2001b).

### *Government Initiatives*

Historically, there has been legislation established in order to address the problems of migrant workers. A primary goal of the U.S. government was to provide housing, so this was done by building labor camps. The Farm Security Administration, under the Department of Agriculture, established migrant labor camps in 1935 in California. Eventually, migrant labor camps began appearing all across the country. Most labor camps had utility buildings that included showers, bathrooms, tubs, and washers. There was also a community building for entertainment. Camps also had clinics and nursery schools. These types of living environments were more adequate especially for children. Many camp administrators were concerned about school attendance of migrant children. Some camps had workers in charge of assuring that children were attending school (Cross, 1937; Evans, 1942). Migrant labor camps are still utilized today by many migrant families (Buirski, 1994; Diaz, Trotter, & Rivera, 1989).

These labor camps provided a safe and sanitary place for migrants to live. It is important to keep in mind that not all migrant families were able to obtain housing in these camps because there were a limited number of camps available. The camps also provided migrant families with education and health services, two areas in which migrants needed help (“Council’s Asks Better Deal,” 1948). Although this was the case, the purpose of the Farm Security Administration was not to solve all of the problems of migrant families. Instead, it was to have programs and education along with housing and health services to help migrant families (Cross, 1937; Evans, 1942). Additional funding to help aid the financial situation of labor camps was obtained from the Community

Facilities Act, also known as the Lanham Act (Clinton, 1946).

Another way the government tried to help improve the quality of life for migrants was by establishing committees to research the problems that migrant families faced and provide solutions. One of these committees was the Federal Inter-Agency Committee on Migrant Labor. This committee was established in 1946 for the purpose of improving the living and labor standards of migrant workers in industry, transportation, and agriculture (“United States Migrant Workers,” 1947). Suggestions were made to the U.S.

government on ways to improve migrant life. These included: a) legislation and regulation with respect to child labor, wages, labor camps, labor contractors, transport, workman’s compensation, social security, health, education, welfare, and recreational services, b) housing, health, nutrition, welfare, and related services for migrant families, c) child labor and education – providing a good education and decreasing child labor, d) safeguarding family life and protecting the rights of children and researching the effect this has on child development.

The National Citizens Council of Migrant Labor was another committee established to address the needs of migrant families. It was formed in 1947 and included persons from national, state, and local organizations. Their purpose was to improve the living and working conditions of migrant workers (“Council’s Asks Better Deal,” 1948). They established a program for migrant children that addressed attendance laws, child labor laws, community health services, childcare services, education, youth programs, housing, transportation, wages, workman’s compensation, social security, and residency requirements for public assistance programs. This council produced a report that found

that migrant children attended school sporadically, many could not read, and many did not complete elementary school. They suggested that attendance laws be amended so that migrant children had to go to school and that there be funds to help schools in the education of migrant children. The council also urged that schools accept migrant children and adapt the curriculum to their needs (“Children of Migrant Families,” 1949).

This committee made very specific recommendations about child labor laws. These included that children under the age of 14 should not be allowed to work in the agricultural arena unless they were working for their parent’s farm. It also suggested that children between 14 and 16 should not be allowed to work when this work would interfere with their schooling. If they were going to work during breaks, they should provide some type of documentation verifying that they were temporarily out of school. It was recommended that the working hours of these children should be limited to 8 hours a day and 48 hours a week. Attention was also drawn to housing and workman’s compensation for these children (“Migrant Child Workers,” 1939). Many of these suggestions would eventually be incorporated into child labor laws, with the passage of the *Fair Labor Standards Act (FLSA)* in 1938. This law addressed guidelines for child labor including age restrictions on the types of jobs that children could perform as well as the number of hours that children could work (Herman, 2000).

The Committee on Interstate Migration of Destitute Citizens researched the socioeconomic status of migrants just before World War II. This included an examination of the educational problems that migrants faced (Gaumnitz, 1946). This committee discovered that California had done the most research on migrant children

and their education, as well as provided proposed solutions to these problems (Gaumnitz, 1946). The committee made several suggestions on how to improve migrant education. These included training of teachers, extra teachers available for migrant children, ungraded classrooms, classrooms that appealed to migrant children, special services (i.e. health, medical, and psychological) to migrant students, a state-wide tracking system for migrants, assure attendance, emergency schools, and attention to children who speak another language (Gaumnitz, 1945, 1946). Other suggestions also included having smaller classrooms, improving instructional methods, and having a better tracking system for migrant children (Gaumnitz, 1945).

The passage of *ESEA* in 1965 created a new opportunity in education for migrant children. In addition to *ESEA*, there are also other laws that have special provisions for migrant children. The *School to Work Opportunities Act of 1994, Public Law 103-329* (U.S. Congress, 1994), includes migrant children as a special population along with students with disabilities, ethnically diverse students, American Indians, limited English proficient students, Alaska Natives, Native Hawaiians, school dropouts, and academically talented students. The *National Literacy Act of 1991, Public Law 102-73* (U.S. Congress, 1991), includes migrant children as a special population for literacy programs. The *School Dropout Prevention and Basic Skills Improvement Act of 1990, Public Law 101-600* (U.S. Congress, 1990), includes migrant children as a special population in the prevention of dropping out and reentry programs and learning basic skills. Finally, the *Ugustus F. Hawkins-Robert T. Safford Elementary and Secondary School Improvement Amendments of 1988, Public Law 100-297* (U.S. Congress, 1988),

includes migrant children as a special population for prevention, reentry, and summer programs.

*Factors That Make Migrant Students At-risk*

Many of the factors that affected the education of migrant children in the early periods of migration continue to be salient today. Migrant students confronted multiple obstacles of poverty, poor health, and mobility that affected their education (“Children of Migrant Families,” 1949; Herman, 2000; “Migrant Workers,” 1937). Many of these factors revolved around child labor. As the Secretary of Labor (Herman, 2000) at one point stated, “Child labor is also an education issue. We must ensure that our youths, this country’s most precious asset, find positive and safe work experiences that complement, rather than compete with, the educational process” (p. 12). While there were some cases of migrant children that were successful in education (Latta, 1941; Outland, 1935), for the most part, educational opportunities were nonexistent or poor because children that were able to work needed to work for economic reasons, or their parents did not think that enrolling their children in school was worth the trouble if they were not going to be in one place for a sufficient period of time (Clinton, 1946). The children that were not working in the fields were more than likely taking care of younger siblings because there were usually no facilities to take care of the younger children (Clinton, 1946). Many times, school attendance became a problem for migrant children and the policies in place for attendance were not enforced by school personnel (“Migrant Workers,” 1937). In one particular study of 251 families in the 1930’s, migrant children missed an average of 39 days of school, and the most a child missed was 120 days (“Migrant Child Workers,”



1939). Further, migrant students were more likely to drop out of school (Barresi, 1982; Cloud, 1991; Diaz, 1991; Herman, 2000; Hunter, 1982; Pyecha & Ward, 1982; TEA, 1996).

These factors contributed to the difficulties that migrant children encountered in the educational system. Migrant students often did not have equal access to the services a district provided to students. Alternatively, the services that migrant students needed were sometimes not available in schools that they attended (Gaumnitz, 1946; Hunter, 1982). Since migrant students have special needs that arise from their lifestyles, the services they received were not always appropriate or targeted to their specific needs (Gaumnitz, 1946). As a result, migrant students often experienced little advancement within the educational system (Hunter, 1982). Many times, migrant families were also isolated from the community because of their mobility and because of prejudice or negative attitudes (“Council’s Asks Better Deal,” 1948; “Migrant Workers,” 1937).

The nature of the migrant lifestyle means that traveling from place to place will be involved. Because of the frequency of family relocations, migrant children were often enrolled in multiple schools within the same school year. Mobility was found to be associated with low school achievement (Tetreau & Fuller, 1949). Although schools within a single state may have followed one, standardized curriculum, school environments differed significantly both within a single state and across state lines. As a result, migrant children faced gaps in their education and difficulties with adjusting to new social situations (Diaz et al., 1989). Migrant students often faced very limited schooling or no schooling at all (Cloud, 1991; Gaumnitz, 1946; Tetreau & Fuller, 1942).

In general, migrant families moved to where there was an opportunity to work and a place to live. There were no boundaries as to what part of the country they would travel. Poor general health and nutrition, lower life expectancy, higher infant mortality rates, and malnutrition cause educational problems (Hunter, 1982). It is often the case that migrant children were exposed to pesticides and other toxins when they were out in the fields (Herman, 2000). With respect to health services, many migrants were often ineligible for medical services because many of the services had a residency requirement, which would automatically disqualified migrant families because of their mobility (Mott, 1945). Because some migrant students experienced adverse health and medical conditions, they faced an increased risk of developing a disability over their lifetimes (Cloud, 1991).

All of the descriptions up to this point have referenced how life was for migrant children, but unfortunately little has changed. While legislation has been passed to avoid these situations, it continues to be a reality for migrant children. Migrant students continue to face a great deal of barriers to their education as a result of their migratory lifestyle. There are also factors, such as limited English proficiency, poverty, poor health, and poor nutrition that impact the education of many migrant students. Robert Coles, child psychologist and political activist, described the challenges that migrant children faced because of their migrant lifestyle and wrote about “the psychological pressures of growing up in the cycle of migrant farmwork” (Coles, 1971):

How literally extraordinary, and in fact how extraordinarily cruel, their lives are: the constant mobility, the leave-takings, and the fearful arrivals, the demanding

work they often manage to do, the extreme hardship that goes with a meager (at best) income, the need always to gird oneself for the next slur, the next sharp rebuke, except, naturally, for the work that has to be done in the fields. There is...the misery; and it cannot be denied its importance, because not only bodies but minds suffer out of hunger and untreated illness (p.78).

Migrant children continue to face obstacles that impede their educational success, yet some migrant children are able to overcome these obstacles and succeed.

Similar to all other populations, it is expected that within the migrant population, there are migrant students with disabilities. When this is the case, the obstacles to their education seem to greatly increase. Not only are these migrant students faced with obstacles because of their lifestyle, but they are also faced with obstacles due to their disability. In Texas, migrant students are generally Hispanic, economically disadvantaged, and limited English proficient (LEP). Students with disabilities from these three populations (i.e. Hispanic, economically disadvantaged, and LEP) have received attention in the past from TEA with respect to their special education needs. It would seem logical that since migrant students comprise all three of these populations, they would also receive attention for their special education needs. Unfortunately, this has not been the case, and migrant students with disabilities have been invisible.

#### *Statement of the Problem*

Disproportionate representation of Hispanic (Baca & de Valenzuela, 1998; Chinn & Hughes, 1987; Daugherty, 2000; Salend, Garrick Duhaney, & Montgomery, 2002; U.S. Department of Education, 2000d) and LEP students (Baca & de Valenzuela, 1998;

Daugherty, 2000; Gersten & Woodward, 1994) in special education has historically been a problem. The above-mentioned studies look at disproportionality with respect to ethnicity and LEP status separately and not collectively. They also do not include economic disadvantage. TEA has included an examination of the issues of disproportionality in special education as part of its comprehensive system for monitoring school district compliance with federal and state laws relating to special education (TEA, 2002a). Even though migrant students are included in multiple student populations (e.g., Hispanic, LEP, economically disadvantaged), disproportionate representation studies with migrant students are extremely limited. According to two unpublished studies, one by Bird and one by McCoy (as cited in Salend & Reynolds, 1991), migrant students are underidentified in terms of eligibility for special education services. The authors did not provide specific state names, but they referenced that only 1-3% of migrant students received special education services (as cited in Salend & Reynolds, 1991). Recent data on most states fails to include information relating to the percentages of migrant students found to be eligible for special education services. Some states look at the disproportionate representation of ethnic minorities or LEP students in special education, but few, if any, look at migrant students that receive special education services (Baca & de Valenzuela, 1998; Chinn & Hughes, 1987; Daugherty, 2000; Gersten & Woodward, 1994; Salend et al., 2002; U.S. Department of Education, 2000d). Until recently, the three states with the largest migrant populations (California, Texas and Florida) had no information on the specific number of migrant students that were receiving special education services (Barresi, 1982). Even though the need for better

services for migrant students with disabilities has been documented, there has been little progress in developing programs to address this issue (Salend & Reynolds, 1991). In 1977, a task force met with the purpose of discussing the unique needs of migrant students with disabilities (Perry, 1982). All participants of the task force, including parents agreed that “this population of students is not only underserved, but unidentified, and, for the most part, remains unaccounted for in districts throughout the country” (p. 497). The data about these children was also lacking. There was no data pertaining to the number of migrant students that were identified, evaluated, or served (Perry, 1982).

#### *Purpose of the Study*

Migrant students evidence many at-risk factors that may impact their educational performance. Little research has been conducted regarding migrant students with disabilities. As a result, many questions remain unanswered. Some of the literature alludes to there being an underrepresentation of migrant students in special education, but no empirical research exists. The purpose of the study is two-fold. The first is to examine the extent of the migrant student population that is currently identified as having disabilities in the school districts across the state of Texas. At both the national and state levels, current data establish that approximately 12% of the overall public school population has been identified as being eligible to receive special education services (TEA, 2002b; U.S. Department of Education, 2001). Some may assume that there should be a greater percentage of migrant students with disabilities since they are exposed to many factors that make them at-risk. This would mean that at least 12% of the migrant student population at any given school district would be eligible for special

education services. This study will provide an empirical basis for the disproportionate representation of migrant students that received special education services. The second purpose of the study is to examine the common characteristics of school districts that have a disproportionate representation of migrant students that received special education services.

### *Definition of Terms*

Migrant Child means - As defined by Title I, Part C, Section 1309 of the *No Child Left Behind Act of 2001, Public Law 107-110* (U.S. Department of Education, 2002), “a child who is, or whose parent or spouse is, a migratory agricultural worker, including a migratory dairy worker, or a migratory fisher, and who, in the preceding 36 months, in order to obtain, or accompany such parent or spouse, in order to obtain, temporary or seasonal employment in agricultural or fishing work-- (A) has moved from one school district to another; (B) in a State that is comprised of a single school district, has moved from one administrative area to another within such district; or (C) resides in a school district of more than 15,000 square miles, and migrates a distance of 20 miles or more to a temporary residence to engage in a fishing activity” (p. 156).

Migrant Student Record Transfer System (MSRTS) means – the previously used record transfer system used nationwide for migrant students.

New Generation System (NGS) of Migrant Record Transfer means – the database used in Texas to keep information about migrant students.

English Language Learner (ELL) means – a person whose native language is not English

and who is learning English. This type of student can also be referred to as a limited English proficient student.

Economically Disadvantaged means – According to TEA (2002), “those who are reported as eligible for free or reduced-price meals under the National School Lunch and Child Nutrition Program or other public assistance” (p. 395).

Limited English Proficient or Limited English Proficiency means - As defined by the Title III, Part A, Section 9109 of the *No Child Left Behind Act of 2001, Public Law 107-110* (U.S. Department of Education, 2002), “An individual who: (A) who is aged 3 through 21; (B) who is enrolled or preparing to enroll in an elementary school or secondary school; (C)(i) who was not born in the United States or whose native language is a language other than English; (ii)(I) who is a Native American or Alaska Native, or a native resident of the outlying areas; and (II) who comes from an environment where a language other than English has had a significant impact on the individual’s level of English language proficiency; or (iii) who is migratory, whose native language is a language other than English, and who comes from an environment where a language other than English is dominant; and (D) whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual— (i) the ability to meet the State’s proficient level of achievement on State assessments described in section 1111(b)(3); (ii) the ability to successfully achieve in classrooms where the language of instruction is English; or (iii) the opportunity to participate fully in society” (p. 537).

Individuals with Disabilities Education Act (IDEA-PL 105-17) means – the latest version of the federal law that provides special education services to students with disabilities.

Child with a Disability means – Under the *Individuals with Disabilities Education Act, Public Law 105-17* (Wright & Wright, 2002), “a child that has mental retardation, a hearing impairment including deafness, a speech or language impairment, a visual impairment including blindness, serious emotional disturbance, an orthopedic impairment, autism, traumatic brain injury, another health impairment, a specific learning disability, deaf-blindness, or multiple disabilities, and who, by reason thereof, needs special education and related services” (p. 140).

Speech Impairment means – Under the *Individuals with Disabilities Education Act, Public Law 105-17* (Wright & Wright, 2002), “a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, that adversely affects a child’s educational performance” (p. 141).

Other Health Impairment means – Under the *Individuals with Disabilities Education Act, Public Law 105-17* (Wright & Wright, 2002), “having limited strength, vitality or alertness, including a heightened alertness to environmental stimuli that results in limited alertness with respect to the educational environment that is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell



anemia, and adversely affects a child's educational performance" (p. 141).

Mental Retardation means – Under the *Individuals with Disabilities Education Act*, *Public Law 105-17* (Wright & Wright, 2002), "significantly subaverage general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance" (p.141).

Learning Disability means – Under the *Individuals with Disabilities Education Act*, *Public Law 105-17* (Wright & Wright, 2002), "a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage" (p. 141).

Emotional Disturbance means – Under the *Individuals with Disabilities Education Act*, *Public Law 105-17* (Wright & Wright, 2002), "a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (A) An inability to learn that cannot be explained by intellectual, sensory, or health factors. (B) An inability to build or maintain satisfactory interpersonal relationships with

peers and teachers. (C) Inappropriate types of behavior or feelings under normal circumstances. (D) A general pervasive mood of unhappiness or depression. (E.) A tendency to develop physical symptoms or fears associated with personal or school problems. This includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance” (p.140).

### *Research Questions*

1. What are the characteristics of migrant students in Texas with respect to ethnicity, economic disadvantage, and LEP?
2. What percentage of migrant students across the state overall are in special education?
3. What eligibility categories do migrant students qualify for with respect to Speech Impairment, Other Health Impairment, Mental Retardation, Learning Disability, and Emotional Disturbance? How do the state’s number of special education students identified in these five disability categories once migrants are excluded from the general total compare to the number of migrants in the state that fall in each of the aforementioned categories?
4. Does the percentage of students classified as migrant who receive special education services reflect the district’s migrant composition?
5. Does the percentage of students classified as migrant who receive special education services reflect the district’s special education composition?
6. When LEP is added to migrant status, is the percentage difference score different from that of question 4? In other words, by adding this risk factor, how does the

difference score change?

7. Is there a relationship between the percentage difference scores obtained in question 4, question 5, and question 6 and different district categories, such as total district enrollment and total district migrant student enrollment?
8. What are the common characteristics of districts that have the greatest and least percentage difference scores with respect to type of community, geographic region, existence of a migrant program, Migrant PAS overall rating, Bilingual PAS overall rating, bilingual population served in bilingual or ESL programs, total LEP enrollment, total Hispanic enrollment, total economically disadvantaged enrollment, and the total enrollment of Hispanics that received special education services?

### *Design of the Dissertation*

Chapter II will provide a review of related research pertinent to migrant students. Since migrant students are generally Hispanic, LEP, and economically disadvantaged, these populations will be discussed in the chapter. Chapter III delineates the methodology used to conduct the study. This includes the participants, instrumentation, procedures, as well as variables used to investigate disproportionate representation, definitions of district characteristics, and data limitations. Chapter IV elaborates on the analysis and results of the data by research question, while Chapter V includes the summary, conclusions, limitations, and recommendations of the study.

## CHAPTER II

### REVIEW OF RELATED LITERATURE

Migrants provide an essential work element in this country's agricultural industry, and their work is usually seasonal and temporary (Green, 2003). Although accurate data on migrants is difficult to obtain because there are inconsistencies in gathering the data, it is estimated that there are 840,000 migrant farmworkers across the United States with 409,000 children (Martin, 1997). Texas has the second largest population of migrant students in the country, second to California (Kindler, 1995; TEA, 2002b). The characteristics of migrant students across the country may vary, but in Texas, migrants are generally Hispanic, limited English proficient (LEP), and economically disadvantaged. These factors, along with interrupted schooling and other factors put migrant students more at risk of dropping out (DiCerbo, 2001; Wright, 1991). Some researchers consider migrant students to have a triple burden because they are poor, move constantly, and are LEP (Wright, 1991). Others would consider being Hispanic an additional risk factor.

Within the migrant population, there are also migrant students with disabilities that are often considered to have an additional burden, that of their disability. Not only do these children have to deal with the unique educational needs that come about because of their migratory lifestyle, but they also must overcome the obstacles that exist because of their disability. Historically, migrant students with disabilities have been neglected from the research arena.

Many of the factors that make migrant children at risk for educational failure, including unique educational needs, have been documented for many years, but the empirical research on migrant students is almost nonexistent. Henning-Stout (1996) searched a database for the last 10 years and found 32 articles on migrant students. She determined that the majority of the reports came from federal agencies and provided broad statements about migrant students with no true direction for service delivery. For the studies that have been done, many have a great deal of confounding variables, such as the issue of generalizability.

#### *Outline of Topics to Be Covered in Chapter II*

In this chapter Hispanic, LEP, and economically disadvantaged populations will be discussed with respect to general population characteristics, educational achievement, and as recipients of special education services. Migrant students, a population that is generally Hispanic, LEP, and economically disadvantaged, will then be discussed with respect to population characteristics, educational achievement, and additional risk factors in their education. Migrant students receiving special education services will also be discussed with respect to referral and identification, receiving special education services, and disproportionate representation in special education.

#### *Hispanics in the United States and Texas*

*General Population Characteristics.* Hispanics encompass about 12.5% of the population of the United States, while Whites encompass 69.1% of the population and African Americans encompass 12.1% (U.S. Census Bureau, 2000a). Hispanics are becoming one of the fastest growing populations in our country. Hispanics are predicted

to comprise 16.5% of the population by 2020. Approximately one third of all Hispanics are under the age of 18 (U.S. Department of Education, 2000b). There is great variability among Hispanics. The Hispanic population in the United States consists of people from many different countries. These include, but are not limited to, Mexico, Puerto Rico, Cuba, Dominican Republic, Central American countries, and South American countries. Hispanics are projected to comprise 25% of the K-12 population by 2025 (U.S. Department of Education, 2000b). Between 1978 and 1998 the population of Hispanic students in public schools increased by 157%, while there was a 20% increase for Black students and 10% for Whites (U.S. Department of Education, 2000b). In Texas, 32% of the population is Hispanic or Latino of any race, while 68% are not Hispanic or Latino (U.S. Census Bureau, 2000b).

*Educational Achievement of Hispanics.* Hispanics have not been as successful as other groups with respect to educational achievement. They are considered to be more at risk for educational failure than any other race/ethnic group (U.S. Department of Education, 2000a, 2000b). Many Hispanic students are considered at-risk because their families face poverty issues and discrimination (U.S. Department of Education, 2000b). Research has shown that psychosocial stress in school decreased school achievement (Alva & de Los Reyes, 1999). In 1998, Hispanic graduation rates were only 63%, compared to 90% for Whites, and 81% for Blacks (U.S. Department of Education, 2000b). One in four Hispanic eighth graders has repeated at least one grade (Gersten & Woodward, 1994). In the latest state assessment in Texas conducted in March 2003, the Texas Assessment of Knowledge and Skills (TAKS), 85% of third grade Hispanic

students passed the reading test, compared to 96% of White students.

This concern with Hispanics and their educational achievement has received attention from the U.S. government. The government's purpose is to try to improve the educational experiences of Hispanics. In 2000, the White House had a session entitled, "Strategy Session on Improving Hispanic Student Achievement" (U.S. Department of Education, 2000b). At this session five goals to increase educational attainment of Hispanics were established. These included addressing access to early childhood education, language acquisition, closing the achievement gap, and increasing high school and postsecondary completion. Historically, other programs, such as Title I of the *Elementary and Secondary Education Act* (Now *No Child Left Behind Act*), have been designed to help Hispanics, as well as other groups, be successful (U.S. Department of Education, 2000a). Part C of Title I incorporates services for migrant students, which is primarily composed of Hispanics, and Title VII is the *Bilingual Education Act*, which provides districts with funding for bilingual education programs (Baca & de Valenzuela, 1998; U.S. Department of Education, 2000a).

*Hispanics Receiving Special Education Services.* In trying to address the difficulties in the educational realm of many Hispanics, special education services have been utilized as an answer. For those Hispanic students that do have a disability, this can often be a great resource for services, but some research shows that Hispanic children are often misdiagnosed and placed in special education (Artiles, Harry, Reschly, & Chinn, 1999; Chinn & Hughes, 1987; Daugherty, 2000; Harry, 1994; MacMillan & Reschly, 1998; Parrish, 2002). It is often the case that the minority child is considered

exceptional for the wrong reasons, that is because they are culturally different not because of a disability (Chinn, 1979). This leads to the issue of disproportionate representation of Hispanics in special education.

It is assumed that the proportion of all groups in special education should be equal to the proportion of that group in the general school population. If this is the case, then no discrimination exists (MacMillan & Reschly, 1998). This way of looking at disproportionate representation is often termed, “special education enrollment by group,” and is favored by the Office of Civil Rights (Artiles et al., 1999). Researchers (Harry, 1994; Salend et al., 2002) define this type of disproportionality as the percentage of the students in a specific program (e.g., special education) being larger than the percentage of that group in the school population. Another way of looking at disproportionate representation, is termed, “percent of the group in special education program” or “relative ethnic composition in special education programs” (Artiles et al., 1999).

Disproportionate representation has been a major concern for many years. Dunn’s study from the 1960’s (Dunn, 1968) examined the overrepresentation of African American, American Indian, Mexican, and Puerto Rican students in mild mentally retarded classes in California. This study was one of the first to document this problem. Disproportionality is a problem that is being addressed by both the Office of Civil Rights (OCR) and the Office of Special Education Programs (OSEP). The Individuals with Disabilities Education Act (IDEA) requires that states collect data on disproportionality (Daugherty, 2000).



There are contradictory findings in some of the studies that have been done on disproportionality. Some studies have shown Hispanics as overrepresented in certain disability categories and underrepresented in others, while other studies have shown conflicting results. It is often the case that national statistics demonstrate no overrepresentation for Hispanics, but individual state statistics showed otherwise (Chinn & Hughes, 1987). Chinn and Hughes (1987) claimed that Hispanics were overrepresented in the learning disability category and that OCR surveys from 1980 to 1986 for elementary and secondary schools demonstrated that overrepresentation continues to be a problem. Ortiz and Yates (1983) reported that Hispanics in Texas were underrepresented in all categories except learning disability (LD) and that 80% of Hispanics with disabilities fell under the categories of LD and speech language impairment (SI). Hispanic students were underrepresented under IDEA during the 1999-2000 school year (U.S. Department of Education, 2001). During the 1998-99 school year, Hispanic percentages in special education were similar to that of other populations. There was overrepresentation of Hispanic students in the categories of LD, hearing impairment, and orthopedic impairment (U.S. Department of Education, 2000d).

Two major recent studies have been done in the area of minorities in special education and also resulted in conflicting results. The Committee on Minority Representation in Special Education (2002) suggested that disproportionate representation is impacted as a function of poverty. They determined that because a significant number of ethnic groups are living in poverty, it is all of the factors associated with poverty that make these students more prone to disabilities. The

Committee on Minority Representation in Special Education (2002) utilized several ways of examining the data:

The risk index (RI) was calculated by dividing the number of students in a given racial or ethnic category (e.g., Hispanic) served in a given disability category (e.g., LD) by the total enrollment for that racial or ethnic group in the school population. Hence the 'risk index' reveals the percentage of all students of a given racial/ethnic group identified in a given disability category...The odds ratio (OR) divides the risk index of one racial/ethnic group (e.g., black) by the risk index of another racial/ethnic group (e.g., white) and thereby provides a comparative index of risk...Odds greater than 1.0 indicates that the minority group students are at greater risk for identification, while odds ratios of less than 1.0 indicate that they are less at risk (p. 42-43).

While the risk index reveals the exact percentage of students identified for special education services, the odds ratio does not provide the exact percentage, and instead provides a ratio to be used for a comparative basis. An example was provided stating that an odds ratio of 1.24 indicated that there was a 24 percent greater likelihood of identification under that disability category. This study determined that based on data from 1998, Hispanics had a risk index of 0.92 for Mental Retardation (MR), according to the OCR research, and 0.98 according to the OSEP research. This indicates that less than 1% of Hispanics were identified as having MR. The odds ratio was 0.78 according to OCR and 0.87 according to OSEP. This indicates that Hispanics were at a lesser risk of being identified as having MR than Whites. For the LD category, the risk index for

Hispanics was 6.44 according to OCR and 6.81 according to OSEP. This indicates that about 6% of Hispanics were identified as having a LD. The odds ratios were 1.07 according to OCR and 1.12 according to OSEP. Hispanics were 7% and 12%, respectively, more likely than Whites to be identified as having a LD. Under the Emotional Disturbance (ED) category, the percentages for Hispanics were also less than 1%, and the odds ratios were less than 1.0. Hispanics were less likely than Whites to be identified as having an ED.

The Civil Rights Project study (Losen & Orfield, 2002) from Harvard University produced contradictory findings and stated that there was disproportionate representation because of race/ethnicity. In this study, a risk ratio was utilized that is similar to the odds ratio used by the Committee on Minority Representation in Special Education. Parrish (2002) defines the risk ratio as “the risk of a child in a particular minority group being labeled as having a certain disability to the risk of a white child” (p. 20). For this study, when a specific risk ratio is given, that provides the exact percentage of likelihood of identification. For example, a risk ratio of 3.50 would mean that the specific population is 3.5 times more likely to be identified under a certain disability category.

“Overrepresentation is defined as twice the risk of identification in relation to that for white students, with underrepresentation defined as one-half of the risk” (p. 20). Parrish (2002) determined that in Texas, Hispanics were 1.42 times more likely than Whites to be identified as having MR, 0.66 times more likely than Whites to be identified as having an ED, and 1.23 times more likely than Whites to be identified as having a LD. In the area of MR, when there was a lower percentage of Hispanic students enrolled

(1.2%), there was a lower risk ratio of being labeled MR (0.42). When there was a higher percentage of Hispanics students enrolled, the risk ratio increased to 1.55 (Parrish, 2002). It is often believed that overrepresentation exists in the subjective categories where discrimination can occur (MacMillan & Reschly, 1998).

One explanation to the conflicting research is that sometimes the criteria to determine disproportionality varies from state to state (Daugherty, 2000). MacMillan and Reschly (1998) provide information on how the various calculations of disproportionality can lead to different proportions. The percentage of category or program by group answers the question, “What percent of the children classified as MMR [mild mental retardation] are Black?” In other words, the number of Black children who are MMR is divided by the total number of children that are MMR. The second percentage is that of group in category or program. This percentage answers the question, “What percent of Black students are enrolled in MMR programs?” In other words, the number of Black students that are MMR is divided by the total number of Black students. This defines how many children of a certain group a certain program serves. Depending on the percentage used, the results can be misleading. Although ethnicity is seen as the factor that is responsible for disproportionality, some researchers believe that socioeconomic status (SES) is more an issue than ethnicity (MacMillan & Reschly, 1998).

The issue of disproportionate representation with Hispanics, along with African Americans, LEP students, and economically disadvantaged students, has been recognized as important in recent years by TEA. Thus, TEA now includes analyses of

these groups that receive special education services in their Data Analysis System (DAS) (TEA, 2002a). The Office of Special Education also requires states to analyze issues of disproportionality. Element 2 of DAS examines the ethnic distribution of students receiving special education services (TEA, 2002a).

*Conclusions.* Federal and state initiatives on improving the educational achievement of Hispanics in Texas and the United States in general have been well received. There has also been an interest in correcting the problem of disproportionate representation. The study by the Committee on Minority Representation in Special Education was spurred by the government to get some answers on this issue. States are now beginning to examine this issue at the state level, since national data can obscure what is happening at the state level (Artiles et al., 1999).

*Limited English Proficient Students in the United States and Texas*

*General Population Characteristics.* In the U.S., it is estimated that there are 2.3 million LEP children, of which 40% are of Mexican origin (Romo, 1997). Seventy seven percent of students identified as LEP were Hispanic, 13.1% were Asian/Pacific Islander, 5.5% were White, 2.2% were Black, and 1.9% were American Indian/Alaska Native (U.S. Department of Education, 2001). From this information, one could deduce that that the majority of LEP students speak Spanish.

In the United States, surveys of State Education Agencies (SEA) are done on a yearly basis to determine programming for LEP students. Information is gathered in three areas: LEP enrollment, educational condition of LEP students, and services that LEP students receive. The most current information is based on responses from the

1999-2000 school year and included responses from 55 states and jurisdictions (Kindler, 2002). The enrollment of LEP students in public schools across the country was 4,416,580. This represented 9.4% of the total pre-K through 12 enrollment. Seventy percent of the LEP population was enrolled at the elementary level, comprising more than 10% of all the elementary school population. The states with the largest LEP population were California (n = 1,480,527) and Texas (n = 554,949), with California representing one-third of the total LEP population. The states with the largest percentage of LEP students were California (24.9%) followed by New Mexico (23.6%). Texas was fifth with 13.9%. Over 400 languages were spoken across the country during the 1999-2000 school year. Spanish was the native language of most of the LEP students (77%). Spanish was also the top language in Texas. Most states are consistent on the criteria used to identify LEP students. Over 90% used home language surveys, teacher observation, teacher interviews, and parent information, while 80% or more also used student records, students' grades, informal assessments, and referrals (Kindler, 2002).

*Educational Achievement of LEP Students.* The Kindler (2002) study of the SEAs determined that comparing the educational achievement of this population would not produce generalizable results because states generally provided different assessments, and it was often the case that not all of the LEP students participated in assessments. It was determined that since LEP students may or may not have received instruction in bilingual or English as a second language (ESL) programs, it would not be a fair comparison. Many Hispanics are also LEP and are in need of services, yet there was an estimate that at least one-fifth of LEP Hispanics did not receive bilingual or ESL

services (U.S. Department of Education, 2000b). In the latest state assessment in Texas, the TAKS, conducted in March 2003, 77% of third grade LEP students passed the reading test compared to 85% of Hispanics and 96% of Whites. Some LEP students took the Spanish version of the test, and 82% of them passed it.

Thomas & Collier (2003) conducted a five year study on the achievement of English Language Learner (ELL) children in several school districts across the country. The study occurred from 1996-2001 and examined achievement based on nationally standardized tests in English and/or Spanish. There was a comparison of educational achievement based on the participation in eight different programs: 90-10 two-way bilingual immersion (or dual language), 50-50 two-way bilingual immersion, 90-10 one-way developmental bilingual education, 50-50 one-way developmental bilingual education, 90-10 transitional bilingual education, 50-50 transitional bilingual education, ESL taught in academic content, and the English mainstream. This study determined that the best type of program for ELL students to become fluent in both English and their native language as well as to attain high achievement were the enrichment 90-10 and 50-50 one-way and two-way developmental bilingual education programs. These are also known as dual language or bilingual immersion programs.

Research by Brunn (1999) examined the effect of a school's language policy on Mexican migrant children. The research premise was that a policy on language instruction affected the achievement and acculturation of LEP students and background, culture, and culturally competent teachers affected the achievement of these students. Interviews were conducted with 54 teachers, counselors, and principals from one

community. The study focused on elementary grades first through sixth. One particular school was chosen for the study because the principal did not have strong beliefs on second language acquisition or language policies. Teachers fell under one of three categories: English only, language and social bridge builders, and “bilingual is best.” Teachers often referred students that had difficulty learning English to special education services. In the English only group, the students were separated academically, socially, and linguistically from the White students. The “bilingual is best” group had practices that were grounded in research. Teachers were instrumental in providing information about dual language characteristics. It was determined that language policy provided a basis from which teachers could learn about second language acquisition. When language policy did not exist, students were affected in the areas of achievement and social inclusion.

*LEP Students Receiving Special Education Services.* Many times, the misplacement of Hispanics can be attributed to the lack of English proficiency or cultural differences (Gersten & Woodward, 1994). Language differences are often misdiagnosed as a disability. Many teachers turn to special education as a means to get help for LEP students. It is difficult for many teachers to determine if difficulties for these students occur because of a disability or because of language difficulties (Gersten & Woodward, 1994). TEA has included the LEP population in their examination of disproportionate representation. Data element 3 in DAS examines overrepresentation of LEP populations.



Some researchers have discovered that while LEP children are often overrepresented in special education, they are also often under-referred, which leads to LEP students not receiving appropriate services (Gersten & Woodward, 1994). One study of LEP students in California determined that they were overrepresented in the secondary grades, beginning with fifth grade (Artiles, Rueda, Salazar, & Higareda, 2002). This same study found that overrepresentation occurred in the MR and SI disability categories at the district level. Since many Hispanic children with special needs also have LEP issues, teachers do not know how to service these children because of the complexity of their needs, so this leads to the over- and under- representation of LEP Hispanics in special education (Ortiz & Yates, 1983).

*Conclusions.* Although the existence of the *Bilingual Education Act*, Title VII of *NCLB* (U.S Department of Education, 2000a), is supposed to help LEP students in their education, not all LEP students have received these services or have been successful when services were received. LEP students have faced many of the similar challenges in education that Hispanics have faced. They have not done well academically, and there has been a problem with these populations receiving special education services. The problem in Texas has caught the attention of TEA, therefore including this population in their disproportionality studies.

#### *Economically Disadvantaged Students in the United States and Texas*

*General Population Characteristics.* The U.S. Census Bureau collected several statistics on poverty in our country during 2001 (Proctor & Dalaker, 2002). During that year, there were approximately 6.8 million families, which results in 32.9 million people

that were poor in the U.S. The poverty rate was 11.7%, and the children's poverty rate was 16.3%. The total number of poor Hispanics was 8.0 million. Texas had a 15.2% poverty rate. During the 2000-2001 school year of the 4,021,641 total students enrolled in Texas public schools, not including charter schools, 49.3% of these students were considered economically disadvantaged (TEA, 2002b).

*Educational Achievement of Economically Disadvantaged Students.* The same law, *NCLB*, which provides supplemental services for migrant students, is also essentially targeted for economically disadvantaged children (U.S. Department of Education, 2002). This population has been viewed as needing additional services in order to be successful in school. They face many factors that also make them at-risk for educational failure. In Texas, during the 2002-2003 school year, 84% of third grade students classified as economically disadvantaged passed the reading tests of the TAKS, compared to 96% of Whites and 85% of Hispanics (TEA, 2003b). Although this is significantly lower than Whites, it is close to the passing rate for Hispanics.

*Economically Disadvantaged Students Receiving Special Education Services.* Although some researchers (Committee on Minority Representation in Special Education, 2002) may claim that the racial/ethnic disparities that occur in special education are due to poverty and not race/ethnicity, other studies prove that even when poverty is controlled, disproportionate representation still exists (Losen & Orfield, 2002). Some researchers have found that poverty increases the risk of minorities being placed in special education because living in poverty may limit access to medical care,

may cause malnutrition, and there is a greater likelihood of exposure to lead, which has been linked to neurological deficits (Artiles et al., 1999).

TEA examines issue of disproportionate representation in their DAS.

Economically disadvantaged students have been one population, along with Hispanics, African Americans, and LEP students that TEA has included in their analysis of disproportionality in special education (TEA, 2002a). Data element 4 of DAS addresses issues of disproportionality with economically disadvantaged students.

*Conclusions.* Economically disadvantaged students are also considered at-risk in the educational realm, similar to Hispanic and LEP students. They have unique needs in the general education realm as well as in receiving special education services. Being Hispanic has its own set of obstacles, as well as being LEP or being economically disadvantaged. For migrant students that fall under these three categories, the obstacles to education are vast.

#### *Migrants in the United States and Texas*

*General Population Characteristics.* It is estimated that 1.2 million migrants travel every year from the southern U.S. and Mexico throughout the U.S. in order to perform agricultural work (Cuellar, 2002). Migrants are generally divided into two groups: those that travel within a state or from state to state and those (the larger group) that travel from foreign countries or territories into the United States (Salend et al., 1998). They generally travel in three principal streams (Cuellar, 2002). The Eastern Stream incorporates the East Coast states. The Central Stream incorporates Texas and other Midwestern states. The Western Stream incorporates the West coast states and

those states adjacent to California (Kindler, 1995).

The actual number and location of migrants across the country fluctuates continually, but Texas is considered to have the second largest population of migrant students in the country, second to California (Kindler, 1995; National Center for Education Statistics [NCES], 2001; TEA, 2002e). According to Duarte and Rafanello (2001), the number of migrants present in the country or in a particular state can only be approximated because there is no system currently in existence that keeps track, reliably, of the exact number. Many of the migrants are from Mexican descent. In fact, from 1980-1990 immigration of Mexicans to the U.S. was the largest migration from one single country in the history of the United States (Gersten & Woodward, 1994). For 1995-96, 93% of migrant students in Texas were Hispanic, and in 1996-97, 95% were Hispanic. For 1995-96, 35,947 (about 27% of all migrant students) were both LEP and migrant (TEA, 1996).

Migrants are often seen as invisible to society. Buirski (1994) illustrated this sentiment in the words of migrant farmworkers themselves:

You know, people, they sit down and have a great salad and they don't know where it comes from. They think it comes from H.E.B. or Foy's or somewhere like that. Somebody has to pick that asparagus, somebody has to pick all the fruits and vegetables. It's estimated that every farmer feeds approximately 75 people in the world. –Román Cruz, Outreach worker and former migrant worker (p. 62).

Migrant families are still economically dependent on individuals within the family like in earlier times and earn the least of any occupational group in the United States (Buirski, 1994). Many migrant families live in substandard housing and can be exposed to many diseases (Buirski, 1994). As a result, life expectancy among migrants is 49, compared to the U.S. average of 73 (Buirski, 1994).

In an ethnographic study by Diaz et al. (1989), many of the characteristics of migrant families were examined. The main reason people migrate is to find jobs and work is the central component in the lives of migrants. Anything that interferes with work falls on a lower tier. Unfortunately, this sometimes includes the education of children. The majority of migrants are U.S. citizens. Most migrants reside in California, Texas, and Florida when they are not migrating. Some migrants are well informed of specific issues, such as length of crop seasons, before they make a decision to move somewhere else in search of work. The cost of moving is a real factor that many migrant families deal with before making the decision to move. Most migrant families want to return to their home base, so they have to keep in mind how much they will spend on the move. Some migrants are fortunate enough to travel to the same place, know the ropes and find housing quickly.

A seminal study conducted over 30 years ago by child psychologist, Robert Coles, (1971) provides valuable insight into the lives of migrants. Coles conducted a two-year study that followed migrant families in the Eastern stream. During this time, he monitored the attendance of migrant children. He determined that migrant children attended school, on average, about 8 days in one month. Coles also observed that

migrant children began learning about life at a very early age due to their migratory lifestyle, since they were able to explore their surroundings much easier. He also observed that migrant children viewed life as a series of trips because they were always moving. Sometimes they were fearful of moving where at other times they looked forward to the change. A common experience for all migrant students was to attend many schools rather than just one. Mobility posed a big problem in the education of migrant children. In addition, other complicating factors noted by Coles (1971) included: a) children were ill, and/or b) children did not have clothing to wear, c) parents who did not have a great deal of confidence in education, and d) children who did not feel they learned.

*Educational Achievement of Migrant Students.* During the 1999-2000 school year, it was estimated that about 125,988 migrant students were enrolled in public schools in Texas (TEA, 2001b). Four hundred and twelve school districts served migrant students with Migrant Education Program (MEP) funds and 654 school districts identified migrant students (TEA 2001c). Therefore, there were 242 districts that served migrant students but did not have a funded program. From 1995-1998, only 265 districts received MEP funds (TEA, 2001b). In 1989-99 that number increased to 275, and in 1999-2000 it jumped to 412 (TEA, 2001b). In 1999-2000, there were approximately 69,106 migrant students who were Hispanic and were served through a schoolwide campus and 73,944 that were served through programs other than schoolwide (TEA 2001c). These two numbers cannot be combined because some students could have been served under more than one program (TEA, 2001b).

Schoolwide programs fall under Title I, Section 1114 of the *No Child Left Behind Act of 2001, Public Law 107-110* (U.S. Department of Education, 2002). Schoolwide programs allow those schools that have a poverty rate of 40 percent or higher to combine Federal, State, and local funds to “improve the entire educational program of a school” (U.S. Department of Education, 2002). Under schoolwide programs, the funding for programs such as the MEP can be combined with other funding (Strang & von Glatz, 1999). Due to the fact that many migrant students were served under schoolwide programs for the 1998-1999 and 1999-2000 school years, the exact number of Hispanic migrant students served in those years is difficult to determine.

In 1996, the Texas MEP conducted a needs assessment in an attempt to identify the various needs of migrant students in Texas (TEA, 1996). The needs assessment found that migrant students frequently entered school several days or weeks after the beginning of the school year and left that school before the end of the school year in the spring. Since the Texas Assessment of Academic Skills (TAAS) was administered in the spring, the migrant students who left school in the middle of the school year often had to take the TAAS somewhere other than the school in which they originally enrolled during the fall. Migrant students who transferred in the middle of the school year also tended to have incomplete coursework and have incomplete class credits as a result. Many times, to avoid the problem of losing credits, migrant students had to complete work by correspondence or distance learning. A high proportion of migrant students dropped out. There was also a discontinuity of services when migrant students moved from one district to another. Due to missing sign up or registration deadlines, many migrant

students did not get to participate in extra-curricular activities. Lastly, since many students dropped out of school in order to help support their family, they often resorted to getting their GED. Migrant families value education, but since migrant children face so many obstacles in their education, it is often easier for them to drop out (Martinez, Scott, Cranston-Gingras & Platt, 1994).

Most of the migrant characteristics that were mentioned previously have a bearing on migrant students' difficulty in education. The TAAS is the standardized assessment of academic achievement that was used in the state of Texas up until the spring of 2002. In general, migrant students in Texas have demonstrated lower passing rates on the TAAS exams than the overall student population (TEA, 2002c). Table 1 demonstrates TAAS passing rates from the spring of 2000 through the spring of 2002. From the 1999-2000 school year through the 2001-2002 school year, the state passing rate for all students for all tests of TAAS were 79%, 82%, and 85%. For migrant students, they were 64%, 68%, and 72% (TEA, 2002e). For White students those percentages were 89%, 90%, and 92%. For African American students they were 67%, 71%, and 76%. For Hispanics they were 72%, 75%, and 79%. For those students that are economically disadvantaged, their pass rate percentages were 70%, 73%, and 78%. For students that were LEP, their pass rate percentages were 49%, 53%, and 58% (TEA, 2002c). Out of all of these other groups that are often considered at-risk (i.e., African Americans, Hispanics, and economically disadvantaged students), migrant students still had lower TAAS passing rates. Only LEP students had lower passing rates than migrant students.



Table 1. TAAS Passing Rates for the 1999-2000 Through 2001-2002 School Years for All Students, Migrant, African-American, Hispanic, White, Economically Disadvantaged, and Limited English Proficient Students

	All Tests			Reading			Math			Writing		
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
All Students	79%	82%	85%	87%	89%	91%	87%	90%	92%	88%	87%	88%
Migrant	64%	68%	72%	73%	76%	80%	80%	84%	86%	75%	77%	75%
African American	67%	71%	76%	80%	82%	86%	76%	81%	86%	82%	82%	84%
Hispanic	72%	75%	79%	81%	84%	87%	83%	87%	90%	82%	83%	83%
White	89%	90%	92%	94%	95%	96%	93%	95%	96%	94%	93%	94%
Econom. Disadvantaged	70%	73%	78%	80%	82%	86%	81%	85%	88%	81%	82%	82%
Limited English Proficient	49%	53%	58%	60%	63%	69%	69%	74%	79%	60%	60%	59%

*Note:* All TAAS tests were administered in the spring of that particular year.

Data was compiled from multiple tables on the Texas Education Agency website. These were found on the following web addresses:

[http://www.tea.state.tx.us/student.assessment/reporting/results/swresults/august/g310all\\_au.pdf](http://www.tea.state.tx.us/student.assessment/reporting/results/swresults/august/g310all_au.pdf)

<http://www.tea.state.tx.us/migrant/documents/MigrantProgramSummary2k2.pdf>

The new state assessment, the Texas Assessment of Knowledge and Skills (TAKS) began to be used in Texas schools in the spring of 2003. With the implementation of this new test came new competency requirements, particularly for third graders. All third graders complete a reading and math test. In order for third graders to be promoted to the next grade level, they must pass the reading test (TEA, 2003a). This will have great impact on migrant students and other populations. Table 2 demonstrates the scores for third graders on the reading tests on three different testing administrations (TEA, 2003b, 2003c, 2003d, 2003e, 2003f, 2003g). The first administration was in March 2003. The second and third administrations were retest sessions in April and July 2003. The percentages reported include those that met the standard for the year, those that would have met the TAAS standards, and those students that took the Spanish version of the TAKS and met the standard.

Many migrant students struggle educationally, and as a result are retained. A research study conducted with the Migrant Student Record Transfer System, which was a national migrant database, determined that migrant students were retained 2 to 10 times more often than their nonmigrant peers (Wright, 1991). This study also demonstrated that retention decisions were often made arbitrarily and that dropping out was highly linked to retention within the first two years of school. In order to better prepare migrant children for school, there are preschool programs and Head Start programs specifically for migrant children (TEA, 2001b; Wright, 1991).

*Additional Risk Factors.* In order to determine the pressing issues of migrant students, Diaz (1991) conducted a study that consisted of interviews with 598 Puerto

Table 2. TAKS Passing Rates for Spring 2003 in Grade 3 Reading for All Students, Migrant, African American, Hispanic, White, Economically Disadvantaged, Limited English Proficient, and Special Education Students

GRADE 3 READING										
	March			April (retest)**			July (retest)**			
	Met Standard	Met TAAS Standard	*Spanish Met Standard	Met Standard	TAAS Standard	*Spanish Met Standard	Met Standard	TAAS Standard	*Spanish Met Standard	
All Students	89%	92%	82%	63%	73%	59%	49%	59%	45%	
Migrant	78%	84%	78%	61%	71%	54%	39%	52%	44%	
African American	82%	87%	70%	58%	68%	40%	47%	58%	---	
Hispanic	85%	89%	82%	60%	71%	59%	48%	59%	45%	
White	96%	97%	73%	76%	84%	50%	58%	64%	57%	
Econom. Disadvantaged	84%	88%	82%	60%	70%	59%	47%	58%	45%	
Limited Eng. Proficient	77%	83%	82%	58%	69%	59%	45%	56%	45%	
Special Education	84%	88%	64%	62%	71%	52%	46%	56%	37%	

Note: \*There were less students taking the Spanish TAKS, so some groups may have had very low numbers. Percentages may be skewed.

\*\*Students that did not pass the March administration took retests.

Data was compiled from multiple tables on the Texas Education Agency website. These were found on the following web addresses:

[http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/g3\\_mch.pdf](http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/g3_mch.pdf)  
[http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/g3sp\\_mch.pdf](http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/g3sp_mch.pdf)  
[http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/gr3\\_april.pdf](http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/gr3_april.pdf)  
[http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/gr3sp\\_april.pdf](http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/gr3sp_april.pdf)  
[http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/gr3\\_july.pdf](http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/gr3_july.pdf)  
[http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/gr3sp\\_july.pdf](http://www.tea.state.tx.us/student/assessment/reporting/results/summary/sum03/taks/gr3sp_july.pdf)

Ricans, Mexicans, and Central Americans. The interviews examined the primary factors that impacted the education of migrant students. The interview results revealed that the following factors had the greatest impact on the education of migrant students: ecology, education, psychology, and economics. The ecological factor consisted of all aspects relating to a migrant's total adjustment to this country. The educational factor consisted of the challenges resulting from the changes of schools and curriculum and the use of a different language. The psychological factor included social isolation and lowered self-esteem as well as cultural adjustment. This study also revealed that a consensus of respondents believed that schools did not provide enough support for migrant students.

There are more at-risk students within the migrant population than any other at-risk population. Migrant students confront multiple obstacles of poverty, poor health, mobility, limited English proficiency (LEP), and social isolation (Coballes-Vega & Salend, 1988; Diaz et al., 1989; Platt & Cranston-Gingras, 1991; Reyes-Blanes, 2002; U.S. Department of Education, 1992). The nature of the migrant lifestyle means that traveling from place to place will be involved. Because of the frequency of family relocations, migrant children often enroll in multiple schools within the same school year. Although schools within a single state may follow one, standardized curriculum, school environments differ significantly both within a state and across state lines. As a result, migrant children face gaps in their education and difficulties with adjusting to new social situations (Diaz et al., 1989). When migrant children move to and from the same schools, the difficulties within the social situation might be lessened because of some familiarity with places and faces, but it is often the case that migrant children do

not attend the same schools. Migrant students often face very limited schooling or no schooling at all (Cloud, 1991). Since mobility is a great part of a migrant lifestyle, this often prevents migrant students from access to appropriate educational services or prevents the continuity of services (Coballes-Vega & Salend, 1988).

In general, migrant families will move to where there is an opportunity to work and a place to live. There are no boundaries as to what part of the country they will travel. Time issues are almost non-existent. Many families will consistently move at specific times in the year, usually from mid-March to November as they follow the availability of farm-based work. Other migrant families will move at any time because there is another opportunity for labor elsewhere. Mobility can sometimes be a factor with language-minority groups, and if there is not consistency among the types of bilingual programs they are exposed to, the educational gap will likely increase (Gersten & Woodward, 1994). Although most migrant families are in this country legally, some migrants do have to face additional issues because of their illegal status in the U.S. (Green, 2003).

Children often work instead of attending school so they can provide economic help (Coles, 1971; Henning-Stout, 1996; Platt & Cranston-Gingras, 1991). Child labor laws lower the age limit for children doing farm work (Henning-Stout, 1996; Herman, 2000). Child labor legislation occurred in 1938 with the passage of the Fair Labor Standards Act (FLSA) (Herman, 2000). The FLSA established guidelines for child labor including age restrictions on the types of jobs that children could perform as well as the number of hours that children could work. Agricultural work has several exceptions.

Because the U.S. depends a great deal on agriculture, the laws of agricultural types of jobs seem to be more lenient (Herman, 2000). The Wage and Hour Division of the Department of Labor oversees the compliance of the FLSA (Herman, 2000). Provisions under the FLSA include statements that children ages 14 and 15 can work in agriculture if it does not interfere with school and if they are properly trained, children ages 12 and 13 can be employed if it does not interfere with school and if it is at the same place as their parents work, children under the age of 12 can work if it does not interfere with school and if their parents consent, and children ages 10 or 11 may work under special provisions from the U.S. Department of Labor (Herman, 2000). Compulsory attendance laws have helped decrease child labor somewhat (Herman, 2000). The reality for many migrant children is that even though there is a law delineating at what age they can work, they often work at even younger ages (Diaz et al., 1989; Martinez et al., 1994).

Poor general health and nutrition, lower life expectancy, higher infant mortality rates, and malnutrition cause educational problems (Hunter, 1982). In fact, migrants have a higher proportion of malnutrition than any other population in this country (Platt & Cranston-Gingras, 1991). Since some migrant students experience adverse health and medical conditions, they face an increased risk of developing a disability over their lifetimes (Cloud, 1991). It is believed that many migrant families live in substandard conditions that are often similar to those found in Third World countries. For this reason, many face health problems and illnesses unique to this type of living situation (Diaz et al., 1989).

Migrant children are also exposed to pesticides and other environmental toxins, which can have effects on developing disabilities (Platt & Cranston-Gingras, 1991). One migrant commented (Buirski, 1994):

Families work around pesticides. They don't know it. Farmers spray on weekends, families start working again Monday. Kids develop rashes, red eyes, sore throat—blame it on the heat. Upset stomachs also. High rate of cancer, and kidney problems. Often by 45 they're on dialysis. —Trini Gomez, Panhandle social worker and former migrant worker (p. 36).

Pesticide contact can be especially detrimental during pregnancy and early childhood (U.S. Department of Education, 1992). Because of the nature of children, they are more exposed to environmental toxins present in water, food, and air than are adults. This occurs because children take in more of these things in proportion to their weight (Landrigan, 2001/2002). Children are also more likely to be exposed to environmental toxins because of their hand-to-mouth contact and the likelihood that they play close to the ground. This increases their exposure to toxins as well as pesticides that stay close to the ground (Landrigan, 2001/2002). The nervous systems of children have difficulties repairing any damage that might have been caused by environmental toxins. Therefore, if children have damages from the toxins, it is more likely that the damages will be permanent and irreversible (Landrigan, 2001/2002). From 1990-1992, an estimation of 20,000 visits to the emergency room were a result of pesticide exposure. Of this number, 61% were children (Landrigan, 2001/2002). One study (Baca, 2002) in California revealed that Hispanic farmworkers had higher rates of brain, leukemia, skin,

and stomach cancers than other Hispanics in California. The farmworker unions attributed this finding to the pesticides used in the fields, but there was no supporting evidence for this conclusion.

These factors contribute to the difficulties that migrant children encounter in the educational system. Migrant students often do not have equal access to the services a district provides to all students. Alternatively, the services that migrant students need are sometimes not available in schools that they attend (Hunter, 1982). Since migrant students have special needs that arise from their lifestyle, the services they receive are not always appropriate or targeted to their specific needs. As a result, migrant students often experience little advancement within the educational system (Hunter, 1982).

*Conclusions.* The majority of migrant students in Texas are Hispanic, LEP, and economically disadvantaged. The educational needs of Hispanic students, LEP students, and economically disadvantaged students have been individually documented and unfortunately, these students do not fare as well as their counterparts. For migrant students, the educational needs are compounded because they are generally a part of each of the three previously mentioned groups, and in addition, they have other unique needs. Consequently, the issues that result from their frequent movement are complicated and exacerbated by poverty and differences in culture and language (Hunter, 1982). These factors place migrant students at-risk for dropping out (Platt & Cranston-Gingras, 1991). With all of the at-risk factors that migrant students face, some researchers believe that people might expect the rates of migrant students receiving special education services would be above average (Platt & Cranston-Gingras, 1991).



*Migrant Students in Special Education*

*Referral and Identification.* The identification of migrant students for special education services can be extremely difficult considering all of the factors involved in their migratory lifestyle. One major challenge in the referral and identification process involves the length of time necessary to complete an initial referral and evaluation of a student for special education services. Typically, an initial referral and evaluation of a student can take up to three months. With a migrant student, it is not uncommon for a teacher or parent to initiate the process of identifying and evaluating the student for special education services, only to have the student leave the district before the referral process is completed (Platt & Cranston-Gingras, 1991; Pyecha & Ward, 1982). It has been recommended that the folders for the students that have begun the assessment process be red-flagged so that everyone is aware that the assessment process has begun (California State Department of Education, 1986). There is also a shortage of bilingual professionals that can accurately assess migrant students (Platt & Cranston-Gingras, 1991). Other times communities are not invested in migrant children and since school personnel know the student will migrate, they will not refer the child for an evaluation (California State Department of Education, 1986; ESCORT, 2001; Platt & Cranston-Gingras, 1991; U.S. Department of Education, 1992). This quote found in Buirski's (1994) book identifies what can happen with the referral of a migrant child:

I think of the migrant child as a handicapped child. He's somebody else's problem. They let him go from place to place and then he moves down the road

and becomes somebody else's problem. Out of sight out of mind. –Rafael Guerra, Migrant educator and former migrant worker (p. 96).

Many times if the migrant student's disability is not a visible one, a migrant student with a disability is simply never evaluated or identified for special education services (Perry, 1982). Sometimes because of the lack of communication between states or the lack of consistency in regulations, migrant students are reevaluated repeatedly. There can often be a delay of records, particularly special education records, that results in reevaluation as well (California State Department of Education, 1986). Consequently, excess time and money are spent on assessment (Sauer, 1982). It is important to keep in mind that migrant student's medical records should be included in the assessment process because they could have health problems that may seriously affect their learning (Coballes-Vega & Salend, 1988). Sometimes MEP directors are not aware that migrant students can qualify for special education services (Platt & Cranston-Gingras, 1991).

Some researchers believe that migrant students are referred for special education because the teachers compare their behavior to the traditional White student (Coballes-Vega & Salend, 1988). Other times, migrant students are classified as having a disability because they are LEP (California State Department of Education, 1986). In these cases, migrant students may be misdiagnosed as having a disability. There are characteristics that migrant students possess that could be identified as a disability, when in reality it is a characteristic that is due to their lifestyle. Coles (1971) described migrant children he observed as not hesitating to interrupt any particular task and start another one. This could be misinterpreted as not being able to finish something that was started, when

essentially it is a function of the migrant lifestyle and should not point to any type of psychological dysfunction. Migrant children learn from their parents that one has to adapt to moving and finding work that may be different (Coles, 1971). Green (2003) also points out that the factors of the migratory lifestyle often affect the motivation, energy, and attention span of migrant children. Deficits in these areas could be misdiagnosed as a disability as well. Therefore, it is important to keep in mind the culture and lifestyle of migrant children when determining whether they are eligible for special education services (California State Department of Education, 1986). In fact, it is required by the *Individuals with Disabilities Education Act (IDEA), Public Law 105-17* that a student's limited English proficiency and cultural factors be ruled out as a possible reason for any specific learning difficulty (Wright & Wright, 2002).

When cultural and linguistic factors are not considered, a migrant student will be misdiagnosed, as demonstrated by an educator from the California Policy Workshop (California State Department of Education, 1986) in the following example:

In another school district, there was a case concerning identification of an entire family as educably mentally retarded (EMR). What happened is the school psychologist tested the oldest boy first. He was fifteen and tested out as EMR. The family either didn't speak English and/or spoke limited English. The psychologist did not speak Spanish. She was concerned and sensitive to this situation. So, she had the oldest boy translate the WISC-R to the children. This was a student that didn't speak English himself. Psychologists know that it takes a lot of work, money, and technical knowledge to translate tests professionally,

yet this school psychologist asked this boy to translate the test. It seems ludicrous that if a fifteen-year-old was EMR, how could he possibly translate the test? Apparently, he could as far as the psychologist was concerned (p. 26).

Researchers (Baca & Harris, 1988; California State Department of Education, 1986; Coballes-Vega & Salend, 1988) have found that identification of migrant students with special needs often occurs in later grades than their non-migrant peers. Some researchers believe that the identification and referral of migrant children would improve and migrant children with disabilities would receive appropriate services if the MEP personnel were more knowledgeable about the identification and referral process for special education (Sauer, 1982).

*Receiving Special Education Services.* Once a migrant student is identified as having a disability, mobility continues to be a problem in receiving special education services (California State Department of Education, 1986; Platt & Cranston-Gingras, 1991). The migrant student with a disability faces problems not only because of his/her migratory lifestyle but also because of his/her disability (California State Department of Education, 1986; Reyes-Blanes, 2002; Salend, Michael, & Taylor, 1984; U.S. Department of Education, 1992). In a study by Barresi (1982), several barriers to migrant students receiving special education services were identified. These included interstate differences in special education eligibility requirements, residency requirements, waiting periods and limited program options, interstate differences in minimum competency testing and graduation requirements, scheduling and program model inadequacies, and lack of communication and cooperation between programs and

agencies serving migrant students. Another study that included Arizona, California, Colorado, New Mexico, Oklahoma, and Texas found that major problems existed in the state guidelines as result of not addressing what states should do in ensuring continuity of services for migrant students (Hunter, 1982).

Part of the problem in providing services to migrant students with disabilities is that it is often very difficult for a receiving district to obtain necessary information about that student and his/her disabling condition in a timely manner in order to immediately provide appropriate services to the student. Prior to 1994, many of the state MEP's used the Migrant Student Record Transfer System (MSRTS) as a means of tracking and facilitating migrant student transfers. According to Reynolds & Salend (1990) MSRTS included a place for special education information. The *Improving America's School Act of 1994, Public Law 103-382* terminated the MSRTS, so the Texas MEP created the New Generation System of Migrant Record Transfer (NGS) (TEA, 1996). This system does not yet contain any special education information on migrant students.

The California State Department of Education conducted a workshop in 1984 to address the special education needs of migrant students with disabilities (California State Department of Education, 1986). During this workshop, special, migrant, and bilingual education personnel from California and 21 other states and Puerto Rico came together to identify problems and issues facing migrant students with disabilities and propose solutions. The workshop manuscript cited that *Brown v. Board of Education* determined that an education was a right that must be available to all on equal terms, but this was not the case for migrant students with disabilities. It was determined that there was a lack of

data on migrant children and most state departments had incomplete data on migrants. There was also evidence that identification and reporting of migrant students needed to improve. There were many areas in the service delivery of special education services to migrant students that needed improvement. The following issues were seen as extremely important: lack of identification, continuity of appropriate education, MSRTS, and mobility. The task group's priorities were sharing of general information, working with research specialists in the design of a database study to help establish concrete information regarding this population, plan and sponsor a workshop designed to clarify further the needs and develop strategies for migrant students in the state, and ensure timely identification, assessment, diagnosis, placement, and follow-up services for migrant students with exceptional needs. All of these should involve key state decision makers and lead to policy implementation.

General results of the workshop focused on making people aware of the needs of migrant students with disabilities, enhancing communication and sharing of information, and improving diagnosis, assessment, and awareness of cultural and language needs of migrant students. The *California Policy Workshop on Special Education Needs of Migrant Handicapped Students* (California State Department of Education, 1986) determined several findings in the areas of awareness, communication, information transfer, identification and diagnosis, interagency coordination, funding, staff training, language needs, assessment, bilingual personnel, delivery system, and instructional program. Several highlights from the workshop will be described. It was determined that because there was a lack of awareness of the needs of migrant students with

disabilities, it was the job of state departments to increase awareness. The awareness also had to be increased among the personnel of bilingual education, special education, migrant education, and the general public. Communication needed to be established between all personnel that worked with migrant students with disabilities. This would aid on the transfer of information about these students. Training should have been established for all personnel working with migrant students with disabilities on what services are available across the state and at the local level. Migrant education, bilingual education, and special education needed to improve their communication both at the local and state levels. One recommendation to improve communication was to include Individualized Education Programs (IEP), psychological, and health data on the migrant database, as well as all special education information. The migrant database during this time was MSRTS. Agencies often had different goals, rules for eligibility, and confidentiality requirements that impeded communication among the different agencies. Memorandum of understandings (MOUs) may have helped in this situation. Funding was often a problem because of the fluctuation in enrollment and enrollment dates.

Relatively few studies have examined the subject of migrant students receiving special education services. The federal law relating to special education was originally enacted in 1975 as the *Education of All Handicapped Children Act, Public Law 94-142*. That law was then amended in 1990 by the passage of the *Education of the Handicapped Act Amendments of 1990, Public Law 101-476*. This act changed the name of the *Education for All Handicapped Children Act* to the *IDEA*, which was then reauthorized in 1997 (Jacob-Timm & Hartshorne, 1998). Pyecha and Ward (1982) conducted one of

the preliminary studies on how *Public Law 94-142* was affecting migrant students with disabilities. The hypothesis of this study was as follows: “Given the high degree of mobility of migrant children and the low priority historically given them relative to the provision of educational services, it was hypothesized that the majority of handicapped migrant students are not served in accordance with *Public Law 94-142*” (p. 491). This study also investigated whether migrant students identified as being eligible for special education services in one district were also identified and receiving services in subsequent districts in which they chose to enroll and whether they had an IEP being implemented across districts. The study sample included 130 migrant students enrolled in 2, 4, or 6 grade who were considered by school personnel to be trainable MR or functionally disabled and 23 more migrant students with severe disabilities selected randomly from California, Florida, and Texas. The authors of the study did not provide information about how many schools the students were enrolled in across all states. Results showed that 119 of the students were enrolled in only one school district during the 18-month period of the study. The remaining 34 students were enrolled in more than one district--some in up to 5 schools-- during the time period of the study. The 153 students were enrolled in a total of 295 schools during the 18-month time period. Telephone interviews were conducted to obtain information about the students’ educational histories and IEP development experiences across all schools in which they were enrolled. Researchers reported that at 52-66% of the 295 school enrollments, school personnel stated that the students had not been appropriately evaluated, and therefore the students were found not to have a disabling condition. Of these schools,



61% possessed evaluation data and assessment information from the previous school of enrollment. This might have influenced their decision not to conduct a reassessment. The authors of the study only provided percentages and not the actual number of schools. Of the 295 school enrollments, students were identified in 80% of the school enrollments as being in need of special services. With respect to IEP's, 72-86% of the students had one or more IEP's developed, and 58-72% had an IEP developed for each of the school enrollments during the 18-month period of the study. Twenty-six of the 295 enrolling schools said they received an IEP or other specific information about the students regarding their special needs. The communication of the IEP was very limited, which is consistent with what other studies have found (Reynolds & Salend, 1990). Some issues of concern raised from the study were confidentiality and the assumption that since *PL 94-142* mandated IEP's, schools might not be willing to accept the IEP developed by a previous school district. Other studies have also explored the issue of confidentiality with IEP's (Barresi, 1982). This study presents viable information about the challenges that migrant students who have been identified as having a disability face because of the mobility issue and the lack of communication between schools about the student's special needs, although there are some problems with generalizing the results of this study to the entire migrant population.

Several studies have included suggestions for working with migrant students with disabilities. Baca and Harris (1988) suggest that modifying curriculum to incorporate those used in bilingual classrooms can help migrant exceptional children. Self-concept is an area of weakness for most migrant children because of the difficulties

relating to social factors of mobility. An acculturation component along with an ESL component can help instruct migrant exceptional students. Strong family ties, which are evident in most migrant families, should be capitalized upon in order to help migrant exceptional students. Services should be coordinated through the migrant education office. Some programs, such as the East Coast Migrant Head Start Project and the National Migrant Special Education Center of New York have tried to develop better ways for continuity of services (U.S. Department of Education, 1992).

Salend et al. (1984) surveyed 163 educators in the state of New York who worked with migrant students with disabilities with a 45-item questionnaire on competencies necessary to educate migrants with disabilities. The migrant population was comprised of 40% Black, 35% Hispanic, and 25% White. Competency ratings fell into two general categories: special education and migrant education. Most competencies were rated as very important or important. The following competencies were rated as “very important”:

- a) Employs methods for enhancing the self-concept of migrant handicapped students; b) Establishes a positive social-emotional climate in the classroom; c) Demonstrates a sensitivity to the language, geographical background, and cultural variations of migrant handicapped students; d) Develops individualized educational plans for migrant handicapped students; e) Trains parents to work more effectively with their own migrant handicapped children; f) Demonstrates a knowledge of instructional materials used in teaching migrant handicapped students; g) Organizes the classroom environment in order to maximize learning

including considerations for scheduling, seating arrangements, presentation of materials, and setting limits; h) Is aware of community agencies that provide services to migrant handicapped students and their families; i) Maintains records of the performance of migrant handicapped students; j) Organizes, implements, and evaluates an instructional program in all areas of instruction; k) Develops and maintains interpersonal communication skills with other professionals (p. 52).

The following competencies were rated as “important”:

- a) Describes the development sequence in all areas of instruction;
- b) Understands the concept of nondiscriminatory testing and its effects on migrant handicapped students; c) Demonstrates a knowledge of migrant individuals’ lifestyles; d) Understands the school code and laws whose provisions are essential to the rights and responsibilities of migrant students; e) Constructs and develops teacher-made materials for use with migrant handicapped students; f) Is aware of the professional resources and organizations providing assistance and services to teachers of the migrant handicapped;
- g) Plans and implements an instructional program that specifies instructional goals, behavioral objectives, instructional sequence, learning activities, materials, and evaluation tools; h) Facilitates the transfer of records of migrant handicapped students; i) Promotes the mainstreaming of migrant handicapped students with nonhandicapped students; j) Understands the legal, medical, and education definitions relative to exceptional persons; k) Provides consulting and supporting

services to other professionals working with migrant handicapped students;

- l) Uses specific methods of working with migrant handicapped students in the classroom; m) Can explain to parents the school code and laws whose provisions are essential to the rights and responsibilities of migrant handicapped students and their families; n) Uses methods for dealing with the migrant handicapped student's family needs; o) Employs methods to developing and maintaining the migrant handicapped student's cultural identity; p) Assists parents and families in dealing with the medical health and dental needs of migrant handicapped students; q) Can make other nonhandicapped students aware of the needs of migrant handicapped students; r) Understands the causes of the different exceptionalities; s) Understands the methods for identifying and classifying migrant handicapped students; t) Administers, scores, and interprets the relevance of the findings of selected educational diagnostic and achievement tests; u) Uses a variety of audiovisual instructional media in teaching migrant handicapped students; v) Performs task analysis; w) Evaluates commercially available programs and materials developed for use with migrant handicapped students; x) Can specify the characteristics of the different exceptionalities; y) Demonstrates a knowledge of the Migrant Student Record Transfer System (MSRTS) for planning and implementing an educational program for migrant handicapped students; z) Demonstrates proficiency in the native language of the migrant handicapped student; aa) Understands the legislation and litigation which

has significantly affected the handicapped; bb) Performs as a member of a child study team in determining the needs of migrant handicapped students;

cc) Understands the current research related to migrant handicapped students;

dd) Defines and discusses major issues in special education (e.g., mainstreaming, labeling) (p. 52-53).

The following competencies were rated as “somewhat important”: “Conducts research relating to migrant handicapped students; and Understands the historical aspects of special education” (p. 53).

*Disproportionate Representation of Migrant Students in Special Education.*

States are now required by the OSEP to determine if disproportionate representation in special education with respect to race/ethnicity exists (Losen & Orfield, 2002). These statistics are reported each year in an annual report to Congress. Disproportionate representation of migrant students is generally not reported, although migrant students with disabilities were included in a special section of the *Fourteenth Annual Report* (U.S. Department of Education, 1992). The report from the United States Department of Education (1992) concluded that in 1989-90, MSRTS had 34,123 student reports with disabilities across the country. In 1986-87, 97% of the migrant students with disabilities were receiving special education services and 96% had IEPs. Of all the migrant students with disabilities, 64% (3,609) fell into the LD category, while only 43.6% of all students were labeled as LD. Therefore, migrant students had a higher rate of students in the learning disability category. In that same year, 25.8% of all students in special education

were labeled as having a speech impairment, while only 13.4% of migrant students in special education were in that category.

The Interstate Migrant Council (as cited in Baca & Harris, 1988) as well as other researchers (ESCORT, 2001; Platt & Cranston-Gingras, 1991) identified migrant students as being underserved in special education. Perry (as cited in Baca & Harris, 1988) and Coballes-Vega and Salend (1988) also reported that migrant students were under-represented in special education, finding that only one percent of migrant students were receiving special education services. An unpublished study by Bird and an unpublished study by McCoy (as cited in Reynolds & Salend, 1990) indicated that in California, the state with the largest migrant population, only 1.37 percent of migrant students were eligible for special education services, and in Oregon only 3 percent of migrant students received special education services. The U.S. Department of Education (1992) cited that migrant students were underserved in the areas of behavior disorders and communication impairments, but overserved in mild mental retardation and other health impairments. Most of these studies indicate a disproportionate underrepresentation of migrant students in special education. If students are underrepresented, this denies them of the benefits of that particular program that has been designed to meet their unique educational needs (Salend et al., 2002). A Washington state survey by Duran (as cited by California State Department of Education, 1986) provided several conclusions: migrant students were generally slightly underrepresented, and there was an overrepresentation of migrant students in MMR and hard of hearing. There was an underrepresentation of migrant students in behaviorally and communication disabled.

*Conclusions.* If migrant students with disabilities are going to benefit from special education services, some researchers believe that both systems (migrant education and special education) must work together to provide appropriate services to migrant students with disabilities (Perry, 1982). Researchers (California State Department of Education, 1986) have found that lack of communication between migrant education and special education often prevents migrant students with disabilities from obtaining the services they need. This is similar to the argument that LEP students with special needs would be better served by both bilingual education and special education. Others feel that it is ultimately the responsibility of special educators to identify and serve these children because they have the legal mandate to do so (Perry, 1982; U.S. Department of Education, 1992). The California State Department of Education (1986) determined that migrant students would only benefit if migrant educators worked collaboratively with both special educators and bilingual educators. It is also going to be extremely important that personnel be trained on using unbiased assessment with migrant children as well as knowing how to instruct children who are linguistically different from other children with disabilities (Ortiz & Yates, 1983). It will also be important for personnel to become familiar with issues of the migrant lifestyle (Diaz et al., 1989).

### *Summary*

Migrant children are typically Hispanic, LEP, and economically disadvantaged. Therefore, migrant children face all of the combined challenges that each of these groups face individually, along with the challenges of their migrant lifestyle. As a result,

migrant children could be seen as having a quadruple threat. Not only are they Hispanic, LEP, and economically disadvantaged, but they are also migrant. For these reasons and the ones described in this chapter, it is important to obtain more research on this population in order to better serve their educational needs. Migrant students that have a disability have often been neglected or not served appropriately, which violates the fundamental requirement of the *IDEA*, which are to provide a free and appropriate public education to all students regardless of their disability (Wright & Wright, 2002). Many questions remain about migrant students with disabilities. Thus, this study will attempt to address this void in the research literature.



## CHAPTER III

### METHOD

#### *Participants*

During the 2000-2001 school year there were 1040 school districts in the state of Texas, not including charter schools. According to data from the Public Education Information Management System (PEIMS) obtained from TEA, there were a total of 635 districts in the state that enrolled 76,561 migrant students during the 2000-2001 school year. For the districts that had a migrant population that was less than five, the actual numbers were not reported. Of the 635 districts, 474 had a migrant population of five or greater. These districts accounted for 99.4% ( $n = 76,188$ ) of the migrant population, with only 463 migrants in the other 161 districts. Of the 474 districts, 223 had a migrant population of five or greater that received special education services. The information for these 223 districts will be the information presented for our sample. There were 71,656 migrant students in our sample of 223 school districts with 9,078 migrant students in our sample that received special education services.

For each school district, information from PEIMS, and the Program Analysis System (PAS) was obtained. Information obtained from PEIMS included characteristics of the district with respect to its migrant population, limited English proficient (LEP) population, economically disadvantaged population, Hispanic population, and its population that received special education services. Each district's overall ratings for migrant programs and bilingual programs were obtained from PAS.

### *Instrumentation*

*Public Education Information Management System.* PEIMS is used by all public school districts in Texas as a means to comply with the Texas Education Code in providing information so that the state legislature and TEA can oversee public education (TEA, 2001a). Information from PEIMS is used to compile several reports that provide useful information about the school districts in Texas. These include the Academic Excellence Indicator System (AEIS), the Accountability Ratings System, the Snapshot, Pocket Edition, and TEA Standard Reports. It is also used for District Effectiveness and Compliance (DEC) Monitoring, annual dropout reports, federal reporting, school report cards, textbook allocations, certification-to-assignment checks, legislative modeling, school program funds, allocation of foundation, and general statistic uses. PEIMS contains student demographic and academic performance, personnel, financial, and organizational information. The student enrollment section of PEIMS provides information on ethnicity, migrant status, LEP status, home language, economic disadvantage, special education, bilingual education, ESL, and other pertinent information. For the present study the district information used will be a compilation of the student characteristics.

*Program Analysis System.* PAS has been developed by TEA as a means of analyzing data at the district level for a variety of program areas (TEA, 2002a). These program areas include bilingual education, career and technology education, emergency immigrant education, gifted and talented, migrant education, optional extended year, state compensatory education, and student support. For each program area, a number of

data elements specific to that program are analyzed. For example, under the Migrant Education Program (MEP) the data elements for the 2000-2001 school year included funding allocations, audit exceptions for ineligible expenditures or student eligibility, late annual MEP reports, TAAS passing rates compared to the state standard, TAAS participation rate, percentage of migrant dropouts compared to the state dropout rate, and the percentage decrease of migrant students in given school years. For the present study, data elements for bilingual education and migrant education were examined.

*Special Education Data Analysis System.* The DAS system was developed by TEA as part of its comprehensive system for monitoring school district compliance with federal and state laws relating to special education (TEA, 2002a). DAS was designed to provide for the ongoing analysis of district special education data. TEA uses the information obtained through DAS to determine the appropriate schedule for and extent of on-site inspections or compliance visits to school districts. For the 2000-2001 school year, DAS consisted of 12 different data elements. These included “Element 1: Percent of students that received special education services, Element 2: Ethnic distribution of students that received special education services, Element 3: Percentage of LEP students that received special education services compared to the percentage of LEP students in the district, Element 4: Percentage of economically disadvantaged students that received special education services compared to the percentage of economically disadvantaged students in the district, Element 5: Percent of students in five most prevalent disability categories, Element 6: Instructional placement setting (125% Rule), Element 7: TAAS (now TAKS-Texas Assessment of Knowledge and Skills) passing rates compared to

state standard, Element 8: Percentage of special education students exempted from TAAS and State Developed Alternative Assessment (SDAA) compared to statutory standards, Element 9: Percentage of district alternative education placements/juvenile justice education placements (DAEP/JJAEP) referrals for students receiving special education services compared to DAEP/JJAEP referrals for all students, Element 10: Percent of dropouts who were students receiving special education services, Element 11: Potential disproportion of African American students identified as having mental retardation, and Element 12: Potential disproportion of LEP students in special education identified as having a speech language impairment (SLI)” (TEA 2002a). DAS now contains 10 different data elements, with Element 5 no longer being used.

Several of the data elements in DAS, specifically Elements 2, 3, 4, 11, and 12, examined the potential disproportion of certain student groups in special education. TEA provides methodology for determining the “seriousness” of any disproportion representation (TEA, 2002a). The following methodology was used by TEA (2002a) during the 2000-2001 school year for Element 2:

1. For each ethnic category within each district, calculate a special education ethnicity percentage:

$$\text{Special education ethnicity percentage} = \frac{\# \text{ of special education students in a given ethnic category}}{\# \text{ of special education students enrolled in the district}}$$

2. For each ethnic category within each district, calculate an overall ethnicity percentage:

$$\text{Overall ethnicity percentage} = \frac{\# \text{ of students in a given ethnic category}}{\# \text{ of students enrolled in the district}}$$

3. For each ethnic category within each district, a difference score is calculated by subtracting the special education ethnicity percentage from the overall ethnicity percentage for all students.

$$\text{Difference score} = \frac{\text{overall ethnicity percentage} - \text{special education ethnicity percentage}}{\text{special education ethnicity percentage}}$$

4. The frequency distribution of difference scores for each ethnic category is used to identify the state median (50<sup>th</sup> percentile) for each category.
5. For each ethnic category, the difference score is compared to the state median and, using the statewide distribution, a category Risk Level is assigned for each ethnicity. The Risk Level is from 0 to 4. The higher the number, the worse the rating. Districts can also receive a rating of NR (No rating) when they do not have sufficient data for this element.
6. A District Risk Level is assigned based upon the risk levels determined for each ethnicity.

For the present study, only steps 1 through 3 were used. The calculation varied slightly so that a positive number indicated overrepresentation of that particular group (i.e., migrant students) served in special education. Therefore, in the present study, the overall ethnicity percentage was subtracted from the special education ethnicity percentage.

### *Procedures*

The data for the present study was obtained from TEA by submitting a data request. The data was existing data that had already been collected by TEA. PEIMS data was collected from all school districts on October 26, 2000, the Snapshot 2001 date. This particular year was chosen because it was the first year that an indicator code was

available to identify migrant students on PEIMS (D. Gouge, personal communication, February, 2003). It was also chosen because this is the most recent available data available for PAS and DAS.

#### *Variables Used to Investigate Disproportionate Representation*

There were three difference score calculations utilized in the present study to investigate disproportionate representation. The first difference score determined whether the migrant students that received special education reflected the district's migrant student composition. This was be done by obtaining the difference score between the percentage of migrant students that received special education services and the percentage of migrant students in the district. The calculation was as follows:

$$\frac{\text{Number of SPED migrants}}{\text{Number of all SPED students}} \times 100 - \frac{\text{Number of migrants in the district}}{\text{Total number of students in the district}} \times 100$$

The first part of this calculation is what MacMillan and Reschly (1998) call percentage of category or program by group. This is one way of looking at disproportionate representation. We chose to use this difference score since that is what TEA used.

The second difference score determined whether the overall student population, excluding migrant students, that received special education services reflected the migrant student population that received special education services. This difference score was obtained by subtracting the percentage of all students, excluding migrant students, that received special education services from the percentage of migrant students that received special education services. The calculation was as follows:

$$\frac{\text{Number of SPED migrants}}{\text{Number of all mig. in district}} \times 100 - \frac{\text{Number of all SPED stud. (excl. mig.)}}{\text{Total district enrollment (excl. mig.)}} \times 100$$

This part of the calculation is what MacMillan and Reschly (1998) call percentage of group in category or program.

The third difference determined whether the LEP migrant students that received special education services reflected the district's LEP migrant student composition. The difference score was obtained by finding the difference between the percentage of LEP migrant students that received special education services and the percentage of LEP migrant students in the district. The calculation was as follows:

$$\frac{\text{Number of SPED migrant LEP}}{\text{Number of all SPED students}} \times 100 - \frac{\text{Number of mig. LEP in the district}}{\text{Total number of students in the district}} \times 100$$

This difference score is the same as the first difference score, but LEP is added to migrant status.

#### *Definitions of District Characteristics*

*Type of Community.* There are 8 different types of communities that TEA uses when categorizing districts. The number of districts within each of type of community varies from year to year. The following definitions for type of community were obtained from TEA (2002b):

- *Major Urban:* The largest school districts in the state that serve the six metropolitan areas of Houston, Dallas, San Antonio, Fort Worth, Austin, and El Paso. Major urban districts are the districts with the greatest membership in counties with populations of 650,000 or more, and more than 35 percent of the

students are identified as economically disadvantaged. In some cases, other size threshold criteria may apply.

- *Major Suburban*: Other school districts in and around the major urban areas.

Generally speaking, major suburban districts are contiguous to major urban districts. If the suburban district is not contiguous, it must have a student population that is at least 15 percent of the size of the district designated as major urban. In some cases, other size threshold criteria may apply.

- *Other Central City*: The major school districts in other large, but not major, Texas cities. Other central city districts are the largest districts in counties with populations between 100,000 and 650,000 and are not contiguous to any major urban districts. In some cases, other size threshold criteria may apply.

- *Other Central City Suburban*: Other school districts in and around the other large, but not major, Texas cities. Generally speaking, other central city suburban districts are contiguous to other central city districts. If the suburban district is not contiguous, it must have a student population that is at least 15 percent of the size of the district designated as central city. In some cases, other size threshold criteria may apply.

- *Independent Town*: The largest school districts in counties with populations of 25,000 to 100,000. In some cases, other size threshold criteria may apply.

- *Non-Metro - Fast Growing*: School districts that are not in any of the above categories and that exhibit a five-year growth rate of at least 20 percent. These districts must have at least 300 students in membership.



- *Non-Metro - Stable*: School districts that are not in any of the above categories, yet have a number of students in membership that exceeds the state median.
- *Rural*: School districts that do not meet the criteria for placement into any of the above categories. These districts either have a growth rate less than 20 percent and the number of students in membership is between 300 and the state median, or the number of students in membership is less than 300 (p. 32).

*Geographic Region*. Geographic regions are generally distinguished by education service centers (ESC). There are 20 ESC's in the state. A map of the ESC's can be found in Appendix A.

*Existence of a Migrant Program*. Districts in the state can apply to receive funding in order to have a migrant program. The information on whether or not a district had a federally funded migrant program was obtained from TEA's Migrant Education Program office (TEA, 2002d) for the 2000-2001 school year.

*Migrant and Bilingual Overall PAS Ratings*. Migrant PAS and Bilingual PAS overall ratings were also obtained from TEA. These ratings are given to districts with respect to their bilingual and migrant programs, respectively, and are based on the data for the 2000-2001 school year from PEIMS. The overall ratings are comprised of various elements for each program. The Migrant PAS included seven elements. These included MEP funding allocation for 2000-2001, A-133 audit exception for ineligible expenditures or student eligibility 2000-2001, TAAS passing rates compared to the state standard, TAAS participation rate, percentage of migrant dropouts compared to the state dropout rate, and the percentage decrease of migrant students in 1999-2000 and 2000-

2001. For the Bilingual PAS, there are a total of 6 elements. These included number of years since last bilingual or DEC visit, TAAS passing rates compared to the state standard, the percentage of LEP dropouts compared to the state LEP dropout rate, the percentage of LEP students whose parents declined having their child served by ESL or bilingual education programs, the number of years the district has received an exception and/or waiver, and the number of LEP students placed in ESL due to parent denial of the bilingual education program. In the overall rating that was obtained for each district, districts were rated from 0-4 or NR for not rated. Those districts that had an overall rating of “NR” were those that had more than one-half of the data elements as not rated.

*Other District Characteristics.* For bilingual enrollment, LEP enrollment, Hispanic enrollment, economically disadvantaged enrollment, and total Hispanic enrollment that received special education services, the numbers were obtained from the PEIMS data obtained from TEA for the 2000-2001 school year for each district. Each population was specified by district.

#### *Data Limitations*

The current data represents the enrollment of migrant students on October 26, 2000, a single day of the 2000-2001 school year. Since the migrant population across the state fluctuates throughout the year, this is a limitation in the data available. TEA’s MEP also has another database known as the New Generation System (NGS) that tracks migrant students. NGS does not include information about migrant students that are receiving special education services; therefore the data was not used from this source.

## CHAPTER IV

### RESULTS

There were a total of 474 districts that enrolled migrant students during the 2000-2001 school year. Of these 474 districts, 223 districts had five or more migrant students that received special education services. TEA did not permit the exact number of migrant students that received special education services to be provided for the other 251 districts for reasons of confidentiality. Our sample of 223 districts accounted for 95.4% (n = 9,078) of migrant students that received special education services, with the other 4.6% (n = 442) enrolled in 251 districts. As such, the analyses in this chapter are seen to be representative of the population of migrant students that received special education services during the 2000-2001 school year and were enrolled in Texas schools during this time period. The analyses done in this chapter are divided by research question. Each research question is presented followed by the analyses that were done to answer that question.

#### *Research Questions*

##### **1. What are the characteristics of migrant students in Texas with respect to ethnicity, economic disadvantage, and LEP?**

According to PEIMS data obtained from TEA, there were approximately 76,561 migrant students enrolled in the state of Texas during the 2000-2001 academic year. Of these 76,561, 91% (n = 69,685) were considered economically disadvantaged, and 45% (n = 34,713) were considered LEP. State totals were not given for the number of migrant students that were Hispanic, but this information was extracted from the data. At least

95% (n = 72,889) of the migrant student population was Hispanic, with the other 5% percent falling into the categories of White, African American, Native American, or Asian American. It is estimated that the percentage of migrant students that were Hispanic was greater than 95% since the data for those districts that had fewer than five in this category was not reported.

**2. What percentage of migrant students across the state are in special education?**

Approximately 12% (n = 9,520) of the migrant student population throughout the state received special education services. The state average for the 2000-2001 school year for all students receiving special education services was also 12% (TEA, 2002b).

**3. What eligibility categories do migrant students qualify for with respect to Speech Impairment, Other Health Impairment, Mental Retardation, Learning Disability, and Emotional Disturbance? How do the state's number of special education students identified in these five disability categories once migrants are excluded from the general total compare to the number of migrants in the state that fall in each of the aforementioned categories?**

Table 3 details information about these disability categories for the 2000-2001 school year for migrant students that received special education services, students that received special education services, excluding migrant students, and the total population of students that received special education services.

During the 2000-2001 school year, approximately 12% (n = 482,597) of the total student enrollment (n = 4,021,641) in Texas received special education services. Of this total number of students served in special education, 462, 987 students received special

TABLE 3. Disability Category by Special Education Population

Disability Category	Migrant Students		All Students (Excluding Migrants)		All Students Served in Special Education	
	N	%	N	%	N	%
SI	1465	16%	96626	21%	98091	21%
OHI	322	3%	39578	9%	39900	9%
MR	458	5%	28218	6%	28676	6%
LD	6639	72%	254314	56%	260953	56%
ED	349	4%	35018	8%	35367	8%
Total	9233	100%	453754	100%	462987	100%

education services under the categories of Speech Impairment (SI), Other Health Impairment (OHI), Mental Retardation (MR), Learning Disability (LD), and Emotional Disturbance (ED). This accounts for 96% of the student population receiving special education services.

Similarly, 12% ( $n = 9,520$ ) of the migrant student population also received special education services for the 2000-2001 school year. Within this population, there were 9,233 migrant students that received special education services under the five aforementioned disability categories. This accounted for 97% of the migrant student population that received special education services.

Although the total percentage of students falling in these five categories is similar for the overall number of students that received special education services (12%) and migrant students that received special education services (12%), further analysis was done to determine if the state's totals in each of the five categories were similar to those for migrant students. A 2 X 5 Chi-square was conducted and found to be significant (Pearson  $X^2 = 1024$ ,  $df = 4$ ,  $p = < .001$ ). The Chi-square was conducted based on the values shown on Table 3. An additional exploration was done to examine the significant differences. This is shown on Table 4, which displays the expected count, observed count, and Chi-square for each cell. A Bonferroni correction ( $.01/10 = 0.001$ ) was utilized for each of the individual Chi-square tests. All of the disability categories for migrant students were found to be significant.

Table 4. Chi-Square Table for Disability Category by Special Education Population

Disability Category	Migrant Students			All Students (Excluding Migrants)		
	<u>Expected</u>	<u>Observed</u>	<u>Chi-Square</u>	<u>Expected</u>	<u>Observed</u>	<u>Chi-Square</u>
SI	1465	1956.2	123.34*	96626	96134.8	2.50
OHI	322	795.7	282.00*	39578	39104.3	5.74
MR	458	571.9	22.68*	28218	28104.1	0.46
LD	6639	5204.0	395.70*	254314	255749.0	8.05
ED	349	705.3	179.99*	35018	34661.7	3.66
Total	9233	9233.0		453754	453754.0	

Note: \*Is significant at the  $p < .001$  level, Bonferroni corrected alpha

For all students that received special education services, excluding migrant students, under these five disability categories, 56% of them fell under the LD category. For migrant students that received special education services under the five disability categories, 72% of them fell under this same disability category. Twenty-one percent of all students, excluding migrants, qualified under SI, while 16% of migrant students fell under this disability category. Nine percent of all students qualified for OHI, while 3% of migrant students fell under this disability category. Eight percent of all students qualified for ED, while only 4% of migrant students qualified. The percentage of students that eligible under MR was about the same, 6% for all students and 5% for migrant students.

**4. Does the percentage of students classified as migrant who receive special education services reflect the district's migrant student composition?**

In order to answer this question, the methodology that was utilized was similar to the one used by TEA in DAS and was described in chapter III. The major difference in this calculation was that in order to have a positive difference score correspond to overrepresentation of migrant students in special education the percentage of migrant students in the district was subtracted from the percentage of migrant students that received special education services. The **percentage of migrant students that received special education services** was calculated by dividing the number of migrant students that received special education services by the number of all students that received special education services and multiplying this ratio by 100. The **percentage of migrant students in the district** was obtained by dividing the number of migrant students in the



district by the total number of students in the district and multiplying this ratio by 100.

The calculation is described as follows:

$$\frac{\text{Number of SPED migrants}}{\text{Number of all SPED students}} \times 100 - \frac{\text{Number of migrants in the district}}{\text{Total number of students in the district}} \times 100$$

For the 223 school districts, the difference scores ranged from 19.40 to -7.28.

The bottom and top quartiles fell at or below -.22 and at or above 3.60, respectively.

Table 5 demonstrates the frequencies of the difference scores for the top and bottom quartiles. The positive numbers mean that there was an overrepresentation of migrant students served in special education, while the negative numbers mean that there was an underrepresentation. Figure 1 displays a histogram of all of the difference scores for this question. The overall mean for the difference scores was 2.20, with a standard deviation of 4.35. The histogram also displays the cutoff points for one, two, and three standard deviations above and below the mean. There were difference scores that were more than three standard deviations above the mean, which indicates significant overrepresentation for those school districts.

##### **5. Does the percentage of students classified as migrant who receive special education services reflect the district's special education composition?**

The analysis for this question was done by obtaining another difference score.

The **percentage of migrant students that received special education services** was obtained by dividing the number of migrant students that received special education services by the total district migrant student enrollment and multiplying this ratio by 100. For the calculation of the **percentage of all students served in special education**, migrant students were subtracted from these numbers. Therefore this calculation was

TABLE 5. Top and Bottom Quartile Frequency Distribution for the Question 4 Difference Scores<sup>1</sup>

Top Quartile				Bottom Quartile			
Difference Score	Frequency	Percent	Cumulative Percent	Difference Score	Frequency	Percent	Cumulative Percent
-7.28	1	.4	.4	3.60	1	.4	75.3
-5.87	1	.4	.9	3.61	1	.4	75.8
-4.44	1	.4	1.3	3.66	1	.4	76.2
-4.32	1	.4	1.8	3.69	1	.4	76.7
-3.62	1	.4	2.2	3.73	1	.4	77.1
-3.51	1	.4	2.7	3.79	1	.4	77.6
-3.51	1	.4	3.1	3.83	1	.4	78.0
-3.43	1	.4	3.6	3.93	1	.4	78.5
-3.32	1	.4	4.0	3.94	1	.4	78.9
-3.10	1	.4	4.5	3.95	1	.4	79.4
-2.99	1	.4	4.9	3.96	1	.4	79.8
-2.99	1	.4	5.4	4.31	1	.4	80.3
-2.94	1	.4	5.8	4.35	1	.4	80.7
-2.87	1	.4	6.3	4.65	1	.4	81.2
-2.73	1	.4	6.7	4.71	1	.4	81.6
-2.37	1	.4	7.2	4.90	1	.4	82.1
-2.07	1	.4	7.6	4.90	1	.4	82.5
-1.84	1	.4	8.1	5.05	1	.4	83.0
-1.81	1	.4	8.5	5.29	1	.4	83.4
-1.76	1	.4	9.0	5.48	1	.4	83.9
-1.73	1	.4	9.4	5.61	1	.4	84.3
-1.64	1	.4	9.9	5.74	1	.4	84.8
-1.31	1	.4	10.3	5.76	1	.4	85.2
-1.25	1	.4	10.8	5.78	1	.4	85.7
-1.18	1	.4	11.2	5.82	1	.4	86.1
-1.16	1	.4	11.7	5.99	1	.4	86.5
-1.09	1	.4	12.1	6.37	1	.4	87.0
-1.07	1	.4	12.6	6.59	1	.4	87.4
-.98	1	.4	13.0	6.60	1	.4	87.9
-.92	1	.4	13.5	7.11	1	.4	88.3
-.85	1	.4	13.9	7.12	1	.4	88.8
-.84	1	.4	14.3	7.23	1	.4	89.2
-.81	1	.4	14.8	7.35	1	.4	89.7
-.78	1	.4	15.2	7.45	1	.4	90.1
-.78	1	.4	15.7	7.90	1	.4	90.6
-.78	1	.4	16.1	7.94	1	.4	91.0
-.71	1	.4	16.6	8.15	1	.4	91.5
-.68	1	.4	17.0	8.23	1	.4	91.9
-.64	1	.4	17.5	8.43	1	.4	92.4
-.54	1	.4	17.9	9.38	1	.4	92.8
-.51	1	.4	18.4	9.51	1	.4	93.3
-.51	1	.4	18.8	10.07	1	.4	93.7
-.48	1	.4	19.3	10.24	1	.4	94.2
-.42	1	.4	19.7	10.24	1	.4	94.6
-.40	1	.4	20.2	10.99	1	.4	95.1
-.39	1	.4	20.6	11.70	1	.4	95.5
-.36	1	.4	21.1	12.13	1	.4	96.0
-.34	1	.4	21.5	12.74	1	.4	96.4
-.32	1	.4	22.0	13.36	1	.4	96.9
-.31	1	.4	22.4	14.45	1	.4	97.3
-.29	1	.4	22.9	17.24	1	.4	97.8
-.28	1	.4	23.3	17.24	1	.4	98.2
-.26	1	.4	23.8	17.31	1	.4	98.7
-.26	1	.4	24.2	18.10	1	.4	99.1
-.23	1	.4	24.7	19.34	1	.4	99.6
-.22	1	.4	25.1	19.40	1	.4	100.0

Note. <sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of migrant students enrolled in the district.

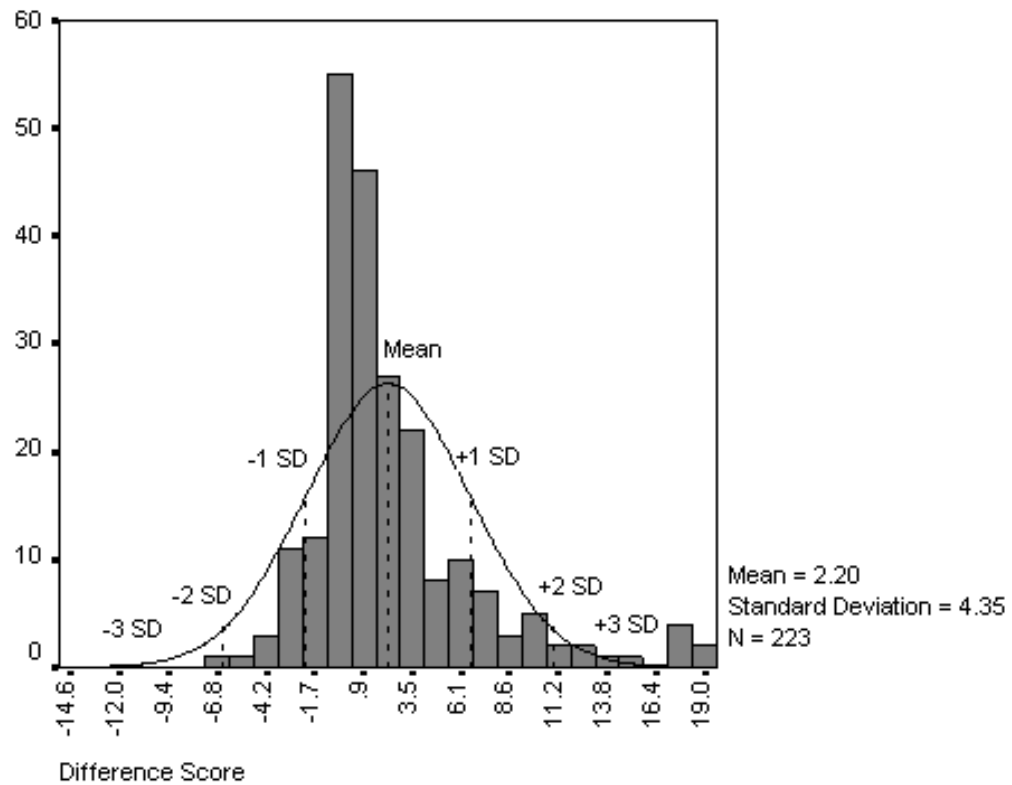


FIGURE 1. Difference Score Distribution of the Difference Between the Percentage of Migrant Students Served in Special Education and the Percentage of Migrant Students Enrolled in the District

obtained by dividing the total number of students that received special education services, excluding migrant students, by the total number of students, excluding migrant students, in the district and multiplying this ratio by 100. The calculation was as follows:

$$\frac{\text{Number of SPED migrants}}{\text{Number of all mig. in district}} \times 100 - \frac{\text{Number of all SPED stud. (excl. mig.)}}{\text{Total district enrollment (excl. mig.)}} \times 100$$

Thus, the difference between the percentages determined if the migrant student population that received special education services reflected the overall student population that received special education services. Again, positive numbers mean that there was a higher percentage of migrant students that received special education services. The negative numbers mean that there was a higher percentage of the overall student population, excluding migrant students, that received special education services.

For the 223 districts, difference scores ranged from -9.14 to 47.38. The top and bottom quartiles fell at or below -.86 and at or above 7.66, respectively. Table 6 demonstrates the frequencies of the difference scores for the top and bottom quartiles. Figure 2 displays a histogram of all of the difference scores for this question. The overall mean for the difference scores was 4.70, with a standard deviation of 8.66. The histogram also displays the cutoff points for one, two, and three standard deviations above and below the mean. For these difference scores, the mean was greater than that of question 4, and the standard deviation is almost double that of the one for question 4. There are also districts that have difference scores that are more than three standard deviations above the mean. Based on TEA standards, these districts could be construed to have a problem with overrepresentation of the migrant student population that received special education services.

TABLE 6. Top and Bottom Quartile Frequency Distribution for the Question 5 Difference Scores<sup>1</sup>

Top Quartile				Bottom Quartile			
Difference Score	Frequency	Percent	Cumulative Percent	Difference Score	Frequency	Percent	Cumulative Percent
-9.14	1	.4	.4	7.66	1	.4	75.3
-8.38	1	.4	.9	7.77	1	.4	75.8
-8.28	1	.4	1.3	7.83	1	.4	76.2
-7.70	1	.4	1.8	8.15	1	.4	76.7
-6.79	1	.4	2.2	8.19	1	.4	77.1
-6.67	1	.4	2.7	8.26	1	.4	77.6
-6.14	1	.4	3.1	9.16	1	.4	78.0
-6.11	1	.4	3.6	9.30	1	.4	78.5
-5.51	1	.4	4.0	9.39	1	.4	78.9
-5.44	1	.4	4.5	9.70	1	.4	79.4
-5.39	1	.4	4.9	9.90	1	.4	79.8
-5.26	1	.4	5.4	10.15	1	.4	80.3
-4.76	1	.4	5.8	10.15	1	.4	80.7
-4.51	1	.4	6.3	10.45	1	.4	81.2
-4.48	1	.4	6.7	10.58	1	.4	81.6
-4.26	1	.4	7.2	10.82	1	.4	82.1
-3.99	1	.4	7.6	11.17	1	.4	82.5
-3.96	1	.4	8.1	11.33	1	.4	83.0
-3.90	1	.4	8.5	11.45	1	.4	83.4
-3.55	1	.4	9.0	11.75	1	.4	83.9
-3.51	1	.4	9.4	11.85	1	.4	84.3
-3.48	1	.4	9.9	11.90	1	.4	84.8
-3.37	1	.4	10.3	12.17	1	.4	85.2
-2.94	1	.4	10.8	12.30	1	.4	85.7
-2.89	1	.4	11.2	12.52	1	.4	86.1
-2.74	1	.4	11.7	12.85	1	.4	86.5
-2.68	1	.4	12.1	13.00	1	.4	87.0
-2.66	1	.4	12.6	13.40	1	.4	87.4
-2.62	1	.4	13.0	13.47	1	.4	87.9
-2.62	1	.4	13.5	13.75	1	.4	88.3
-2.41	1	.4	13.9	14.27	1	.4	88.8
-2.40	1	.4	14.3	14.31	1	.4	89.2
-2.31	1	.4	14.8	14.77	1	.4	89.7
-2.21	1	.4	15.2	15.37	1	.4	90.1
-2.10	1	.4	15.7	15.90	1	.4	90.6
-2.04	1	.4	16.1	16.32	1	.4	91.0
-2.01	1	.4	16.6	16.89	1	.4	91.5
-1.93	1	.4	17.0	17.42	1	.4	91.9
-1.89	1	.4	17.5	17.80	1	.4	92.4
-1.87	1	.4	17.9	18.59	1	.4	92.8
-1.68	1	.4	18.4	18.80	1	.4	93.3
-1.66	1	.4	18.8	19.30	1	.4	93.7
-1.64	1	.4	19.3	19.54	1	.4	94.2
-1.63	1	.4	19.7	20.39	1	.4	94.6
-1.63	1	.4	20.2	20.47	1	.4	95.1
-1.55	1	.4	20.6	23.32	1	.4	95.5
-1.49	1	.4	21.1	24.01	1	.4	96.0
-1.42	1	.4	21.5	25.65	1	.4	96.4
-1.31	1	.4	22.0	26.33	1	.4	96.9
-1.11	1	.4	22.4	27.60	1	.4	97.3
-1.05	1	.4	22.9	29.80	1	.4	97.8
-1.04	1	.4	23.3	29.88	1	.4	98.2
-1.03	1	.4	23.8	34.07	1	.4	98.7
-.99	1	.4	24.2	34.58	1	.4	99.1
-.87	1	.4	24.7	38.55	1	.4	99.6
-.86	1	.4	25.1	47.38	1	.4	100.0

Note. <sup>1</sup> The difference score is the difference between the percentage of migrant students that received special education services and the percentage of all students, excluding migrant students, that received special education services.

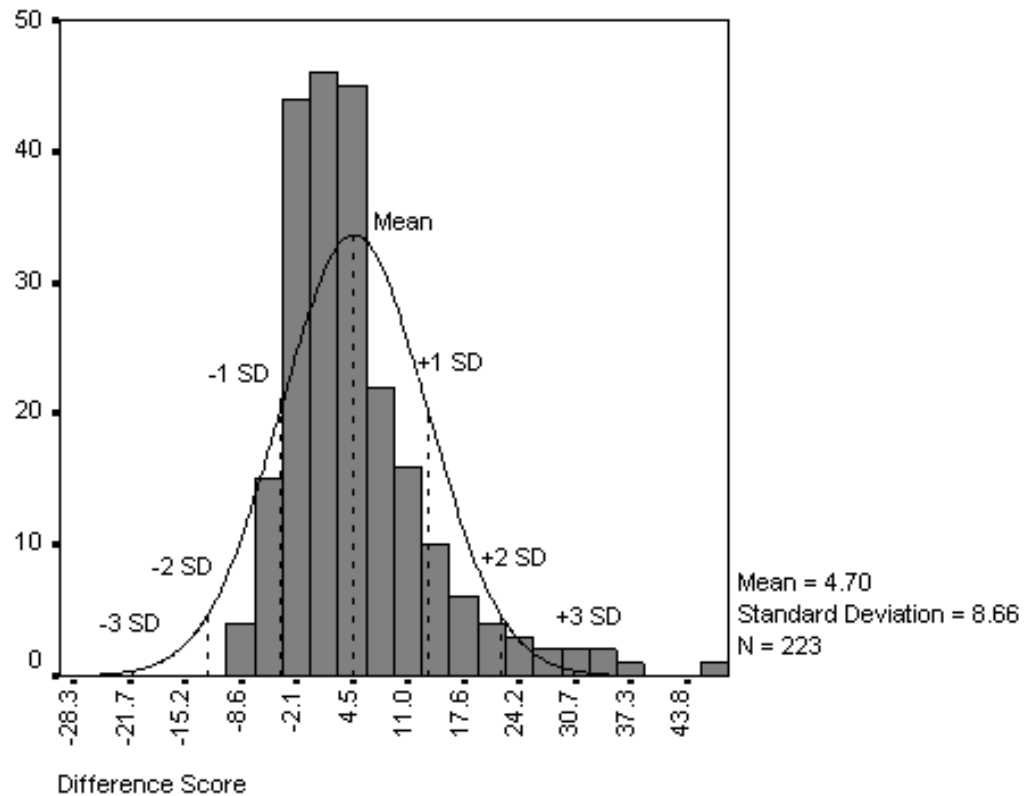


FIGURE 2. Difference Score Distribution for the Difference Between the Percentage of Overall Student Population, Excluding Migrant Students, Served in Special Education and the Percentage of Migrant Students Served in Special Education

**6. When LEP is added to migrant status, is the percentage difference score different from that of question 4? In other words, by adding this risk factor, how does the difference score change?**

For this analysis there were only 125 school districts that had five or more migrant students that were also considered LEP. The **percentage of LEP migrant students** was calculated by dividing the number of LEP migrant students in the district by the total number of students in the district and multiplying this ratio by 100. The **percentage of LEP migrant students that received special education services** was calculated by dividing the number of LEP migrant students that received special education services by the total number of students that received special education services and multiplying this ratio by 100. The difference score was then obtained by subtracting the percentage of LEP migrant students from the percentage of LEP migrant students that received special education services. A positive number means that there was an overrepresentation of LEP migrant students that received special education services. A negative number means that there was an underrepresentation of LEP migrant students that received special education services. The calculation is as follows:

$$\frac{\text{Number of SPED migrant LEP}}{\text{Number of all SPED students}} \times 100 - \frac{\text{Number of mig. LEP in the district}}{\text{Total number of students in the district}} \times 100$$

Across the 125 districts, the difference scores ranged from -0.03 to -17.18. The top and bottom quartiles fell at or below -6.45 and at or above -1.04, respectively. Table 7 shows the frequencies for the top and bottom quartiles. Figure 3 displays a histogram of all of the difference scores for this question. The overall mean for the difference scores was -4.30, with a standard deviation of 4.25. The histogram also displays the

TABLE 7. Top and Bottom Quartile Frequency Distribution for the Question 6 Difference Scores<sup>1</sup>

Top Quartile				Bottom Quartile			
Difference Score	Frequency	Percent	Cumulative Percent	Difference Score	Frequency	Percent	Cumulative Percent
-17.18	1	.8	.8	-1.04	1	.8	75.2
-16.79	1	.8	1.6	-.97	1	.8	76.0
-16.67	1	.8	2.4	-.94	1	.8	76.8
-16.08	1	.8	3.2	-.92	1	.8	77.6
-14.18	1	.8	4.0	-.87	1	.8	78.4
-14.07	1	.8	4.8	-.75	1	.8	79.2
-13.57	1	.8	5.6	-.75	1	.8	80.0
-12.09	1	.8	6.4	-.75	1	.8	80.8
-11.98	1	.8	7.2	-.71	1	.8	81.6
-11.33	1	.8	8.0	-.70	1	.8	82.4
-11.25	1	.8	8.8	-.65	1	.8	83.2
-11.22	1	.8	9.6	-.63	1	.8	84.0
-10.74	1	.8	10.4	-.63	1	.8	84.8
-10.25	1	.8	11.2	-.60	1	.8	85.6
-10.13	1	.8	12.0	-.51	1	.8	86.4
-10.07	1	.8	12.8	-.50	1	.8	87.2
-9.93	1	.8	13.6	-.43	1	.8	88.0
-9.39	1	.8	14.4	-.40	1	.8	88.8
-8.73	1	.8	15.2	-.37	1	.8	89.6
-8.72	1	.8	16.0	-.32	1	.8	90.4
-8.68	1	.8	16.8	-.31	1	.8	91.2
-8.61	1	.8	17.6	-.31	1	.8	92.0
-7.95	1	.8	18.4	-.30	1	.8	92.8
-7.59	1	.8	19.2	-.29	1	.8	93.6
-7.56	1	.8	20.0	-.28	1	.8	94.4
-7.49	1	.8	20.8	-.25	1	.8	95.2
-7.35	1	.8	21.6	-.21	1	.8	96.0
-7.28	1	.8	22.4	-.17	1	.8	96.8
-6.80	1	.8	23.2	-.16	1	.8	97.6
-6.75	1	.8	24.0	-.15	1	.8	98.4
-6.71	1	.8	24.8	-.09	1	.8	99.2
-6.45	1	.8	25.6	-.03	1	.8	100.0

Note. <sup>1</sup>The difference score is the difference between the percentage of LEP migrant students that received special education services and the percentage of LEP migrant students enrolled in the district.



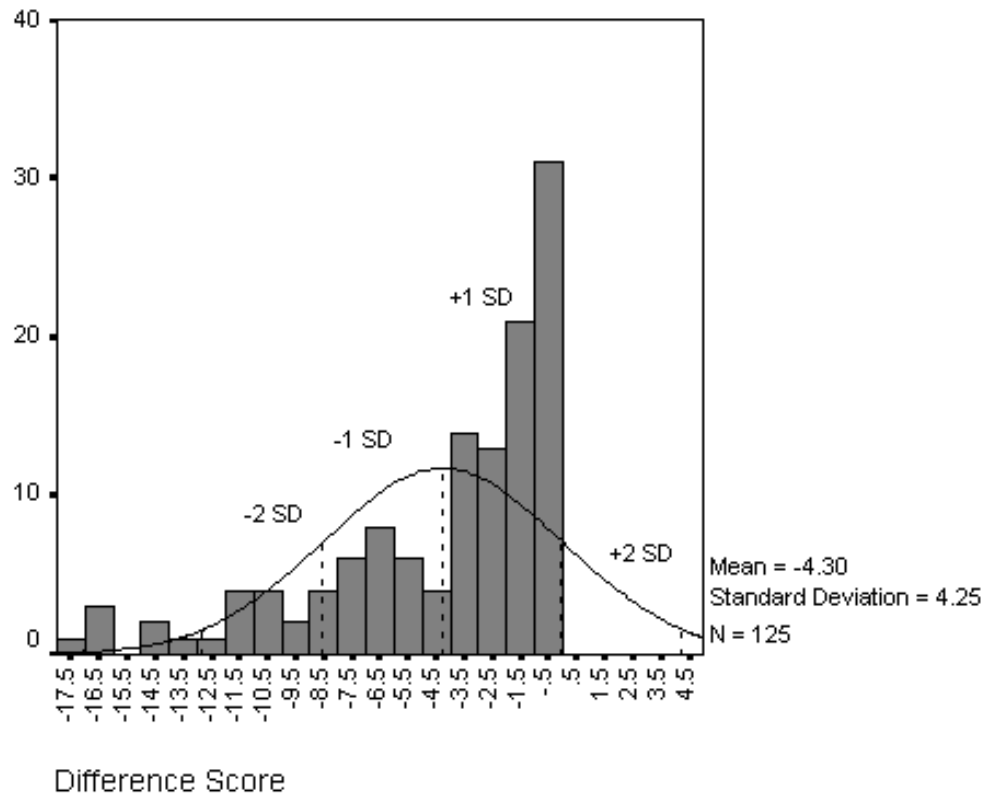


FIGURE 3. Difference Score Distribution for the Difference Between the Percentage of LEP Migrant Students Served in Special Education and the Percentage of LEP Migrant Students in the District

cutoff points for one and two standard deviations above and below the mean. For this figure, all of the districts had an underrepresentation of LEP migrant students that received special education services. There were no districts that fell more than three standard deviations above the mean, but there were districts that were more than two standard deviations below the mean. This signifies that there were districts that had a migrant LEP population that may have needed special education services and did not receive them.

**7. Is there a relationship between the percentage difference scores obtained in question 4, question 5, and question 6 differ when the districts are broken down into different categories, such as total district enrollment and the total migrant student district enrollment?**

For the analysis of this question, correlations were run with the difference scores obtained in questions 4, 5, and 6 and with the total enrollment and the total migrant enrollment of a school district, respectively.

*Question 4 Difference Score.* The question 4 difference score was the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district. The correlation between the difference score from question 4 and the total district enrollment was significant and yielded a negative correlation ( $r = -.151$ ,  $p < .05$ ). This indicates that as the difference score increased, the total district enrollment of the district decreased. The correlation between the difference scores from question 4 and the total migrant student district enrollment was not significant ( $r = -.036$ ,  $p = .597$ ).

*Question 5 Difference Score.* The question 5 difference score was the difference between the percentage of migrant students that received special education services and the percentage of all students, excluding migrant students, that received special education services. For the difference scores obtained in question 5, there was a significant negative correlation with total district enrollment ( $r = -.177, p < .01$ ) and total migrant student district enrollment ( $r = -.180, p < .01$ ). The negative correlations indicate that as the difference score increased, the total migrant student district enrollment and the total district enrollment decreased, respectively.

*Question 6 Difference Score.* The question 6 difference score is the difference between the percentage of LEP migrant students that received special education services and the percentage of LEP migrant students in the district. The correlation between the difference scores in question 6 found a significant positive correlation with total district enrollment ( $r = .280, p < .01$ ), meaning that as the enrollment increased, the greater the difference score. In this case, the larger the total district enrollment, the greater the underrepresentation. There was a negative correlation between the difference score in question 6 and total migrant student district enrollment ( $r = -.257, p < .01$ ), which signifies that the greater difference scores existed when there was a smaller migrant student enrollment.

**8. What are the common characteristics of districts that have the greatest and least percentage difference scores with respect to type of community, geographic region, existence of a migrant program, Migrant PAS overall rating, Bilingual PAS overall rating, bilingual population served in bilingual or ESL programs, total LEP**

**enrollment, total Hispanic enrollment, total economically disadvantaged enrollment, and the total enrollment of Hispanics that received special education services?**

*District Characteristics*

As noted in the research question, district characteristics were examined. These included type of community, geographic region, existence of a migrant program, Migrant PAS overall rating, Bilingual PAS overall rating, bilingual population served in bilingual or ESL Programs, total LEP enrollment, total Hispanic enrollment, total economically disadvantaged enrollment, and total enrollment of Hispanics that received special education services. Definitions for the district characteristics are provided in chapter III. The specific district characteristics for our sample will be described.

*Type of Community.* There are 8 different types of community that TEA uses when categorizing districts.

- *Major Urban:* Of the 1040 school districts in the state during the 2000-2001 school year, 10 of them were a Major Urban type of community. For our sample of 223 school districts, there were 8 districts in this type of community.
- *Major Suburban:* There were 63 school districts that were considered Major Suburban during the 2000-2001 school year. Our sample included 12 of those districts.
- *Other Central City:* Of the 1040 school districts in Texas during the 2000-2001 school year, 38 fell in the Other Central City type of community. Our sample had 19 districts in this category.

- *Other Central City Suburban*: During the 2000-2001 school year, there were 91 school districts within this category for the entire state. Of the 91 school districts, 23 were in our sample.
- *Independent Town*: The state had 75 school districts within this type of community during the 2000-2001 school year. Our sample consisted of 19 school districts.
- *Non-Metro - Fast Growing*: There were 62 school districts under this category across the state. Our sample consisted of 7 school districts within this type of community.
- *Non-Metro - Stable*: This was the community type with the second largest number of school districts for the 2000-2001 school year. There were 281 school districts in this group. We had the largest number of districts from our sample fall in this category. There were 73 school districts in this group.
- *Rural*: With a total number of 420 school districts, this community type had the most school districts in the state during the 2000-2001 school year. Our sample consisted of 62 of these school districts.

*Geographic Region*. For our analyses, those ESC's with fewer than two districts within the region were removed in order to be able to perform post-hoc tests. Thus, 18 ESC's were included in the statistical analyses of the difference scores for question 4 and 5. There were 13 ESC's in the analysis of the difference score for question 6.

*Existence of a Migrant Program*. Within the state of Texas, there were 272 districts that had a migrant program and 768 that did not. For our sample, 180 had a program and 43 did not.

*Migrant and Bilingual Overall PAS Ratings.* In the overall rating that was obtained for each district, districts were rated from 0-4 or “NR” for not rated. Those districts that had an overall rating of NR were those that had more than one-half of the data elements as not rated. For our analyses, these districts were removed from the data set. Of the 223 districts in our sample, 43 had an NR under the Migrant PAS and 10 had an NR under the Bilingual PAS. Therefore, there were 180 districts in the Migrant PAS analyses and 213 in the Bilingual PAS analyses, with the exception of the analyses for the question 6 difference score. For these analyses, there were 108 districts in the analysis of Migrant PAS and 125 districts in the analysis of Bilingual PAS.

*Other District Characteristics.* For the bilingual enrollment, LEP enrollment, Hispanic enrollment, economically disadvantaged enrollment, and total Hispanic enrollment that received special education services, the numbers were obtained from the PEIMS data obtained from TEA for the 2000-2001 school year and varied for each district.

Table 8 presents district and migrant enrollment information for type of community, educational service center, and existence of a migrant program across the state and within our sample. There were a total of 1040 school districts in the state during the 2000-2001 school year. More than half of the school districts ( $n = 635$ ) enrolled a total of 76,561 migrant students. From our data, we obtained that 474 districts enrolled five or more migrant students in their district. Of these districts, only 223 had five or more migrant students that received special education services. The information for these 223 districts will be the information presented for our sample. There were

TABLE 8. Number of Districts and Migrant Student Enrollment by Type of Community, Educational Service Center, and Existence of a Migrant Program

	Districts Across Texas (N = 1040)		Districts in our Sample (N = 223)		Total Migrant Enrollment for Texas (N = 76,098)		Total Migrant Enrollment in our Sample (N = 71,656)	
	N	%	N	%	N	%	N	%
Type of Community								
Major Urban	10	1.0%	8	3.6%	6465	8.5%	6408	8.9%
Major Suburban	63	6.1%	12	5.4%	3711	4.9%	3252	4.5%
Other Central City	38	3.7%	19	8.5%	18368	24.1%	18173	25.4%
Other Central City Suburban	91	8.8%	23	10.3%	18032	23.7%	17724	24.7%
Independent Town	75	7.2%	19	8.5%	8292	10.9%	7618	10.6%
Non-Metro Fast Growing	62	6.0%	7	3.1%	459	.6%	326	.5%
Non-Metro Stable	281	27.0%	73	32.7%	14826	19.5%	13935	19.4%
Rural	420	40.4%	62	27.8%	5945	7.8%	4240	5.9%
Educational Service Center								
1	38	3.7%	32	14.3%	32262	42.4%	32087	44.8%
2	42	4.0%	17	7.6%	3348	4.4%	3272	4.6%
3	40	3.8%	1	.4%	252	.3%	14	.0%
4	54	5.2%	7	3.1%	2659	3.5%	2549	3.6%
5	30	2.9%	0	0%	92	.1%	0	0%
6	56	5.4%	3	1.3%	487	.6%	281	.4%
7	96	9.2%	2	.9%	475	.6%	269	.4%
8	48	4.6%	12	5.4%	1953	2.6%	1681	2.3%
9	40	3.8%	6	2.7%	458	.6%	308	.4%
10	81	7.8%	4	1.8%	1266	1.7%	927	1.3%
11	77	7.4%	7	3.1%	896	1.2%	622	.9%
12	78	7.5%	5	2.2%	714	.9%	306	.4%
13	56	5.4%	16	7.2%	2338	3.1%	1674	2.3%
14	43	4.1%	12	5.4%	759	1.0%	582	.8%
15	43	4.1%	8	3.6%	3461	4.5%	3378	4.7%
16	64	6.2%	21	9.4%	7646	10.0%	7381	10.3%
17	59	5.7%	28	12.6%	3861	5.1%	3542	4.9%
18	33	3.2%	11	4.9%	1784	2.3%	1657	2.3%
19	12	1.2%	9	4.0%	4352	5.7%	4206	5.9%
20	50	4.8%	22	9.9%	7035	9.2%	6920	9.7%
Existence of a Migrant Program								
Yes	272	26.2%	180	80.7%	68104	89.5%	66132	92.3%
No	768	73.8%	43	19.3%	7994	10.5%	5524	7.7%

*Note.* Within the 223 districts in our sample and the 71,656 total migrant students, there were 9,078 migrant students that received special education services during the 2000-2001 school year.

71,656 migrant students in our sample of 223 school districts with 9,078 migrant students in our sample received special education services.

### *Explanation of Analyses*

The distributions for each of the difference scores obtained in questions 4, 5, and 6 were analyzed to determine the common characteristics of the districts. ANOVAs were run to determine if there was a significant difference among the means for type of community, geographic region, existence of a migrant program, as well as Migrant and Bilingual PAS overall ratings. Correlations were run with each difference score and the number of students in the district enrolled in bilingual or ESL programs, the total LEP enrollment, total Hispanic enrollment, total economically disadvantaged enrollment, and total enrollment of Hispanics that received special education services.

### *Common District Characteristics for Difference Scores from Question 4*

The difference scores obtained in question 4 represented the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district. The calculation was as follows:

$$\frac{\text{Number of SPED migrants}}{\text{Number of all SPED students}} \times 100 - \frac{\text{Number of migrants in the district}}{\text{Total number of students in the district}} \times 100$$

*Type of Community.* Table 9 demonstrates the descriptive statistics with respect to difference scores by type of community. The mean difference scores for each type of community ranged from -.01 to 4.85. Major Suburban communities had the lowest mean difference score, while Rural communities had the highest. The ANOVA for type of community was significant,  $F(7) = 5.95$ ,  $p < .001$ . The Tukey post-hoc test demonstrated that districts that were considered Rural were statistically different from 5



TABLE 9. Descriptive Statistics for the Question 4 Difference Scores<sup>1</sup> and Type of Community

Type of Community	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Major Urban	8	.01	.17	.06	-.13	.15	-.15	.41
Major Suburban	12	-.01	.54	.16	-.35	.34	-1.31	.67
Other Central City	19	.49	.98	.22	.01	.96	-.92	2.55
Other Central City Suburban	23	2.12	3.21	.67	.73	3.51	-2.99	9.38
Independent Town	19	.52	2.19	.50	-.54	1.57	-3.51	7.45
Non-Metro Fast Growing	7	1.49	1.14	.43	.44	2.54	.00	3.60
Non-Metro Stable	73	1.51	3.62	.42	.67	2.36	-5.87	14.45
Rural	62	4.85	6.04	.77	3.32	6.39	-7.28	19.40
Total	223	2.20	4.35	.29	1.62	2.77	-7.28	19.40

*Note.* <sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district.

out of the 7 other types of communities. These included Major Urban, Major Suburban, Other Central City, Independent Town, and Non-Metro Stable.

*Geographic Region.* Two ESC's (Region 3 and 5) had fewer than two districts serving more than five migrant students in special education, and thus had to be removed from the analysis in order to be able to perform post-hoc tests. We had 222 districts in this analysis. Table 10 provides descriptive statistics for each ESC. Difference score means ranged from  $-2.01$  to  $4.40$ . Region 7 had the lowest mean difference score, while Region 17 had the highest. Another ANOVA was conducted examining if there was a significant difference across the 18 ESC's with respect to their difference scores. This ANOVA was not significant,  $F(17) = 1.52$ ,  $p = .09$ , therefore there were no significant differences between ESC's and the difference scores obtained in question 4.

*Existence of a Migrant Program.* Table 11 provides descriptive statistics for the districts with and without a migrant program. The mean difference scores for those districts with a migrant program and those without were very similar,  $2.14$  and  $2.41$ , respectively. A third ANOVA was run with the difference scores and whether or not the district had a funded migrant program and was found not to be significant,  $F(1) = .13$ ,  $p = .717$ .

*Migrant and Bilingual Overall PAS Ratings.* Table 12 provides descriptive statistics for the Migrant and Bilingual PAS ratings. For the Migrant PAS overall ratings, the means ranged from  $.74$  to  $3.56$ . For the Bilingual PAS overall ratings, the means ranged from  $-.76$  to  $2.82$ . ANOVAs were run with the difference scores and each of the overall PAS ratings. For these analyses, the districts with a rating of NR were excluded.

TABLE 10. Descriptive Statistics for the Question 4 Difference Scores<sup>1</sup> and Educational Service Center

Educational Service Center	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	32	2.93	3.57	.63	1.64	4.21	-2.73	13.36
2	17	4.40	4.81	1.17	1.93	6.88	-3.43	14.45
4	7	-.156	.54	.21	-.66	.35	-1.31	.27
6	3	-.10	.13	.08	-.43	.22	-.26	-.03
7	2	-2.07	2.03	1.43	-20.29	16.15	-3.51	-.64
8	12	.54	3.21	.93	-1.49	2.58	-3.51	5.48
9	6	2.33	2.31	.94	-.10	4.76	-.10	5.82
10	4	.740	.97	.48	-.80	2.28	-.11	1.87
11	7	-.75	1.19	.45	-1.86	.35	-2.99	.74
12	5	1.79	3.37	1.51	-2.40	5.98	-1.76	7.35
13	16	1.53	4.63	1.16	-.94	3.99	-2.07	17.24
14	12	1.95	3.85	1.11	-.50	4.40	-2.99	10.99
15	8	2.80	3.08	1.09	.22	5.38	-.34	7.45
16	21	2.64	6.60	1.44	-.36	5.65	-5.87	19.40
17	28	4.14	6.26	1.18	1.71	6.57	-7.28	19.34
18	11	2.66	3.74	1.13	.15	5.17	-.42	12.13
19	9	1.03	1.91	.64	-.43	2.50	-.51	4.90
20	22	.81	2.21	.47	-.17	1.79	-4.44	5.78
Total	222	2.20	4.36	.29	1.62	2.77	-7.28	19.40

Note. <sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district.

TABLE 11. Descriptive Statistics for the Question 4 Difference Scores<sup>1</sup> and the Existence of a Migrant Program

Migrant Program	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
No	43	2.41	4.88	.74	.91	3.91	-3.62	19.40
Yes	180	2.14	4.22	.31	1.52	2.77	-7.28	18.10
Total	223	2.20	4.35	.29	1.62	2.77	-7.28	19.40

Note. <sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district.

TABLE 12. Descriptive Statistics for the Question 4 Difference Scores<sup>1</sup> and Migrant Program Analysis System and Bilingual Program Analysis System Overall Ratings

Program Analysis System Overall Ratings	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Migrant								
0	95	2.43	4.46	.458	1.52	3.33	-4.44	17.31
1	24	1.61	4.10	.84	-.12	3.34	-7.28	10.24
2	25	.74	3.38	.68	-.66	2.14	-5.87	13.36
3	29	3.56	5.37	.10	1.52	5.60	-3.51	19.34
4	7	.96	2.82	1.07	-1.65	3.57	-3.51	4.71
Total	180	2.21	4.43	.33	1.56	2.86	-7.28	19.34
Bilingual								
0	127	2.82	4.70	.42	1.99	3.64	-7.28	19.40
2	26	1.37	2.92	.57	.19	2.55	-1.84	12.13
3	45	1.42	4.08	.61	.20	2.65	-4.32	17.31
4	15	-.76	1.41	.36	-1.54	.02	-3.51	1.10
Total	213	2.09	4.33	.30	1.51	2.68	-7.28	19.40

Note. <sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district.

This resulted in 180 districts included in the Migrant PAS analysis and 213 districts in the Bilingual PAS analysis. The ANOVA for the Migrant PAS was found not to be significant,  $F(4) = 1.69$ ,  $p = .15$ . The ANOVA for the Bilingual PAS was significant,  $F(3) = 4.14$ ,  $p < .01$ . Post-hoc tests determined that there was a significant difference in the difference scores of those districts rated as 0 and those rated as 4.

*Other District Characteristics.* Table 13 provides correlation information for the difference scores in question 4 and the other district characteristics. The difference scores in question 4 were found to be significantly correlated with the total Hispanic enrollment of a district and the total Hispanic enrollment that received special education services. This means that the lower the Hispanic enrollment or the total Hispanic enrollment that received special education services, the greater the difference scores, and vice versa. There was no correlation between these difference scores and total bilingual/ESL enrollment, total LEP enrollment, or total economically disadvantaged enrollment.

#### *Common District Characteristics for Difference Scores from Question 5*

The difference scores obtained in question 5 were the difference between the percentage of migrant students receiving special education and the percentage of all students receiving special education. The calculation was as follows:

$$\frac{\text{Number of SPED migrants}}{\text{Number of all mig. in district}} \times 100 - \frac{\text{Number of all SPED stud. (excl. mig.)}}{\text{Total district enrollment (excl. mig.)}} \times 100$$

*Type of Community.* Table 14 presents the descriptive statistics for type of community. Mean difference scores for type of community ranged from  $-1.21$  to  $12.70$  with Major Urban having the lowest and Non-Metro Fast Growing having the highest.

TABLE 13. Correlations for the Question 4 Difference Scores<sup>1</sup> and District Characteristics

	Bilingual/ESL Enrollment	Total LEP Enrollment	Total Hispanic Enrollment	Total Economically Disadvantaged Enrollment	Special Ed Hispanic Enrollment
Difference Score	-.106 .116	-.106 .115	-.136* .042	-.127 .058	-.150* .025

Note. \* Significant at the 0.05 level.

<sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district.

TABLE 14. Descriptive Statistics for the Question 5 Difference Scores<sup>1</sup> and Type of Community

Type of Community	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Major Urban	8	-1.21	3.62	1.28	-4.24	1.81	-9.14	2.68
Major Suburban	12	.45	3.60	1.04	-1.84	2.749	-6.67	7.33
Other Central City	19	.92	3.30	.76	-.67	2.51	-5.51	6.26
Other Central City Suburban	23	5.54	10.80	2.25	.87	10.20	-5.39	38.55
Independent Town	19	3.49	10.43	2.39	-1.54	8.51	-8.38	29.88
Non-Metro Fast Growing	7	12.70	10.62	4.01	2.88	22.52	.00	29.80
Non-Metro Stable	73	3.99	8.49	.99	2.01	5.97	-8.28	47.38
Rural	62	7.46	8.14	1.03	5.39	9.53	-5.26	34.07
Total	223	4.71	8.66	.58	3.56	5.85	-9.14	47.38

Note. <sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of all students, excluding migrant students, that received special education services.

The ANOVA for the difference score and type of community was significant,  $F(7) = 3.66, p \leq .001$ . The Tukey post-hoc test determined that Non-Metro Fast-Growing communities were statistically different from Major Urban, Major Suburban, and Other Central City.

*Geographic Region.* Two ESC's (Region 3 and 5) had fewer than two districts serving more than five migrant students in special education, and thus had to be removed from the analysis in order to be able to perform post-hoc tests, so we had 222 districts in this analysis. Table 15 shows descriptive statistics for each of the ESC's. The mean difference scores ranged from  $-6.92$  to  $20.61$  with Region 7 having the lowest and Region 12 having the highest. Another ANOVA was conducted examining if there was a significant difference across the 18 ESC's with respect to their difference scores. This ANOVA was significant,  $F(17) = 2.24, p < .01$ . The Tukey post-hoc test determined that Region 12 was statistically different from Regions 1, 4, 6, 7, 8, 11, 13, 16, and 19. Region 12 had an overall mean that was much larger than the rest of the ESC's.

*Existence of a Migrant Program.* Table 16 displays descriptive statistics for the existence of a migrant program. There were a total of 180 districts out of the 223 districts that had a funded migrant program. For these 180 districts with funded migrant programs, their mean difference score was  $3.41$ , while the other 53 districts had a mean difference score of  $10.11$ . The third ANOVA run was for the difference scores and whether or not the district had a funded migrant program. This ANOVA was significant,  $F(1) = 22.823, p < .001$ . Districts with funded migrant programs had less

TABLE 15. Descriptive Statistics for the Question 5 Difference Scores<sup>1</sup> and Educational Service Center

Educational Service Center	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	32	3.37	3.98	.70	1.93	4.81	-5.39	14.77
2	17	7.71	6.19	1.50	4.53	10.89	-5.44	17.80
4	7	.43	5.50	2.08	-4.65	5.52	-5.51	11.45
6	3	-2.00	1.84	1.06	-6.58	2.58	-3.99	-.35
7	2	-6.92	1.11	.78	-16.88	3.04	-7.70	-6.14
8	12	2.51	7.60	2.19	-2.32	7.34	-6.79	20.47
9	6	6.21	6.92	2.82	-1.05	13.46	-.34	16.89
10	4	3.09	8.01	4.00	-9.66	15.84	-6.67	9.90
11	7	2.58	14.14	5.35	-10.50	15.66	-4.51	34.58
12	5	20.61	22.85	10.22	-7.76	48.98	-8.38	47.38
13	16	3.54	10.57	2.64	-2.10	9.17	-9.14	27.60
14	12	5.51	8.58	2.48	.06	10.96	-8.28	18.80
15	8	4.88	5.36	1.89	.40	9.36	-1.42	16.32
16	21	2.36	5.29	1.15	-.05	4.77	-6.11	13.00
17	28	6.53	8.95	1.69	3.06	10.0	-5.26	34.07
18	11	5.25	6.16	1.86	1.11	9.39	-2.74	15.37
19	9	.90	1.81	.60	-.48	2.29	-.86	4.23
20	22	6.64	10.57	2.25	1.96	11.33	-2.68	29.88
Total	222	4.64	8.61	.58	3.50	5.77	-9.14	47.38

Note. <sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of all students, excluding migrant students, that received special education services.

TABLE 16. Descriptive Statistics for the Question 5 Difference Scores<sup>1</sup> and the Existence of a Migrant Program

Migrant Program	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
No	43	10.11	13.54	2.06	5.94	14.28	-6.79	47.38
Yes	180	3.41	6.42	.48	2.47	4.36	-9.14	24.01
Total	223	4.71	8.66	.58	3.56	5.85	-9.14	47.38

Note. <sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of all students, excluding migrant students, that received special education services.



overrepresentation of migrant student that received special education services compared to all students that received special education services.

*Migrant and Bilingual Overall PAS Rating.* Table 17 provides descriptive statistics for the districts for the Migrant and Bilingual PAS ratings. The means for the Migrant PAS overall ratings ranged from 1.66 to 5.71. For the Bilingual PAS overall ratings they ranged from 1.71 to 5.74. There were no ratings of 1 for the Bilingual PAS overall ratings. ANOVAs were run with the difference scores and each of the overall PAS ratings. For these analyses, the districts with a rating of NR were excluded. This resulted in 180 included in the Migrant PAS analysis and 213 in the Bilingual PAS analysis. The ANOVA for the Migrant PAS overall ratings was found not to be significant,  $F(4) = 1.42$ ,  $p = .23$ . The ANOVA for the Bilingual PAS overall ratings was also found not to be significant,  $F(3) = 2.15$ ,  $p = .09$ .

*Other District Characteristics.* Correlations were run for this difference scores and various district characteristics and are displayed in Table 18. Significant negative correlations were found between the difference scores and all of the district characteristics. This means that for each district the difference score was greater when the bilingual/ESL enrollment was less, when the LEP enrollment was less, when the Hispanic enrollment was less, when the total economically disadvantaged enrollment was less, and when the total Hispanic enrollment that received special education services was less, respectively. The same is true for the inverse relationship.

TABLE 17. Descriptive Statistics for Question 5 Difference Scores<sup>1</sup> and Migrant Program Analysis System and Bilingual Program Analysis System Overall Ratings

Program Analysis System Overall Ratings	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Migrant								
0	95	3.36	6.12	.63	2.12	4.61	-8.28	18.80
1	24	2.91	5.25	1.07	.69	5.13	-5.26	15.37
2	25	1.78	6.16	1.23	-.76	4.32	-8.38	18.59
3	29	5.71	8.99	1.67	2.29	9.13	-9.14	34.07
4	7	1.66	6.98	2.64	-4.79	8.11	-7.70	11.85
Total	180	3.39	6.63	.49	2.42	4.37	-9.14	34.07
Bilingual								
0	127	5.74	8.69	.77	4.21	7.26	-8.28	47.38
2	26	2.46	6.97	1.37	-.35	5.28	-5.51	27.60
3	45	3.32	8.40	1.25	.79	5.84	-9.14	29.80
4	15	1.71	11.22	2.90	-4.51	7.92	-7.70	38.55
Total	213	4.54	8.71	.60	3.37	5.72	-9.14	47.38

Note. <sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of all students, excluding migrant students, that received special education services.

TABLE 18. Correlations for the Question 5 Difference Scores<sup>1</sup> and District Characteristics

	Bilingual/ESL Enrollment	Total LEP Enrollment	Total Hispanic Enrollment	Total Economically Disadvantaged Enrollment	Special Ed Hispanic Enrollment
Difference Score	-.153*	-.152*	-.171*	-.159*	-.162*
	.022	.023	.011	.018	.015

Note. \* Significant at the 0.05 level.

<sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of all students, excluding migrant students, that received special education services.

*Common District Characteristics for Difference Scores from Question 6*

The difference scores obtained in question 6 were the difference between the percentage of LEP migrant students that received special education services and the percentage of LEP migrant students enrolled in the district. The calculation was as follows:

$$\frac{\text{Number of SPED migrant LEP}}{\text{Number of all SPED students}} \times 100 - \frac{\text{Number of mig. LEP in the district}}{\text{Total number of students in the district}} \times 100$$

*Type of Community.* Table 19 presents the descriptive statistics for these difference scores and type of community. The mean difference scores for all of the types of community were negative, indicating underrepresentation of the migrant students that are also LEP. The ANOVA for the difference scores and type of community was significant,  $F(7) = 6.367$ ,  $p < .001$ . The Tukey post-hoc test determined that Rural communities were statistically different from Major Urban, Major Suburban, Other Central City, Independent Town, and Non-Metro Stable.

*Geographic Region.* Table 20 shows descriptive statistics for each of the ESC's. The mean difference scores ranged from  $-8.02$  to  $-.50$ , indicating underrepresentation of LEP migrant students since they are all negative. Seven ESC's (Region 3, 5, 6, 7, 9, 12, and 14) had fewer than two districts serving more than five migrant students in special education, and thus had to be removed from the analysis in order to be able to perform post-hoc tests. This resulted in 121 districts in this analysis. Another ANOVA was conducted examining if there was a significant difference across the 13 ESC's with respect to their difference scores. This ANOVA was significant,  $F(12) = 3.932$ ,  $p < .01$ .

TABLE 19. Descriptive Statistics for the Question 6 Difference Scores<sup>1</sup> and Type of Community

Type of Community	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Major Urban	7	-.60	.71	.27	-1.26	.05	-1.95	-.03
Major Suburban	10	-1.10	1.21	.38	-1.96	-.23	-4.01	-.15
Other Central City	16	-2.07	2.54	.63	-3.42	-.71	-9.39	-.16
Other Central City Suburban	18	-4.92	3.58	.84	-6.70	-3.14	-11.25	-.94
Independent Town	12	-3.36	3.85	1.11	-5.80	-.91	-12.09	-.25
Non-Metro Fast Growing	3	-2.93	3.84	2.22	-12.47	6.61	-7.35	-.40
Non-Metro Stable	38	-4.66	4.24	.69	-6.0	-3.26	-16.67	-.70
Rural	21	-8.15	4.63	1.01	-10.26	-6.04	-17.18	-.92
Total	125	-4.27	4.25	.38	-5.02	-3.52	-17.18	-.03

*Note.* <sup>1</sup>The difference score is the difference between the percentage of LEP migrant students that received special education services and the percentage of all LEP migrant students in the district.

TABLE 20. Descriptive Statistics for the Question 6 Difference Scores<sup>1</sup> and Educational Service Center (ESC)

Educational Service Center	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	29	-5.75	4.33	.80	-7.40	-4.10	-16.67	-.51
2	7	-1.10	1.19	.45	-2.20	.01	-3.67	-.21
4	4	-.72	.56	.28	-1.61	.16	-1.24	-.17
8	3	-9.12	6.47	3.74	-25.19	6.95	-13.57	-1.70
10	3	-.50	.48	.27	-1.68	.69	-1.04	-.15
11	4	-1.96	2.78	1.39	-6.37	2.46	-6.02	-.09
13	7	-1.43	.81	.31	-2.18	-.68	-2.47	-.31
15	2	-3.85	4.84	3.42	-47.36	39.65	-7.28	-.43
16	17	-8.02	4.72	1.15	-10.45	-5.59	-17.18	-1.31
17	18	-3.91	3.85	.91	-5.83	-2.00	-16.79	-.16
18	5	-3.33	4.88	2.18	-9.40	2.73	-11.98	-.60
19	8	-3.62	2.53	.90	-5.74	-1.51	-7.35	-.32
20	14	-2.42	3.03	.81	-4.17	-.67	-10.25	-.03
Total	121	-4.28	4.29	.39	-5.05	-3.51	-17.18	-.03

*Note.* <sup>1</sup>The difference score is the difference between the percentage of LEP migrant students that received special education services and the percentage of all LEP migrant students in the district.

The Tukey post-hoc test determined that Region 16 was statistically different from Regions 2, 4, 13, and 20.

*Existence of a Migrant Program.* Table 21 displays descriptive statistics for the difference scores and the existence of a migrant program. There were a total of 109 districts out of the 125 districts that had a funded migrant program. For these 109 districts with funded migrant programs, their mean difference score was -3.92, while the districts with no funded migrant program had a mean difference score of -6.67. The third ANOVA run was for the difference scores and whether or not the district had a funded migrant program. This ANOVA was significant,  $F(1) = 6.098$ ,  $p < .05$ . This means that the districts with funded migrant programs had less underrepresentation of LEP migrant students that received special education services.

*Migrant and Bilingual Overall PAS Ratings.* Table 22 provides descriptive statistics for difference scores and the district Migrant and Bilingual PAS ratings. The means for Migrant PAS ranged from -5.73 to -3.18. The Bilingual PAS means ranged from -4.60 to -2.98. There were no ratings of 1 under the Bilingual PAS overall ratings. ANOVAs were conducted with the difference scores and both the Migrant and Bilingual PAS ratings. The ANOVA for the Migrant PAS was not significant,  $F(4) = .50$ ,  $p = .73$ , nor was the one for Bilingual PAS,  $F(3) = .72$ ,  $p = .54$ .

*Other District Characteristics.* Correlations are displayed in Table 23 for the difference scores and the district characteristics. There was a significant positive correlation for the difference scores and total Hispanic enrollment, total economically disadvantaged enrollment, and the total enrollment of Hispanics that received special

TABLE 21. Descriptive Statistics for the Question 6 Difference Scores<sup>1</sup> and the Existence of a Migrant Program

Migrant Program	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
No	16	-6.67	5.14	1.28	-9.41	-3.93	-17.18	-.31
Yes	109	-3.92	4.01	.38	-4.68	-3.16	-16.79	-.03
Total	125	-4.27	4.25	.38	-5.02	-3.52	-17.18	-.03

*Note.* <sup>1</sup>The difference score is the difference between the percentage of LEP migrant students that received special education services and the percentage of all LEP migrant students in the district.

TABLE 22. Descriptive Statistics for the Question 6 Difference Scores<sup>1</sup> and Migrant Program Analysis System and Bilingual Program Analysis System Overall Ratings

Program Analysis System Overall Ratings	<i>N</i>	<i>M</i>	<i>SD</i>	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Migrant								
0	59	-4.12	4.26	.55	-5.23	-3.01	-16.79	-.09
1	20	-3.45	3.88	.87	-5.27	-1.64	-16.08	-.03
2	10	-3.18	4.39	1.39	-6.32	-.04	-14.07	-.29
3	15	-4.77	3.63	.94	-6.78	-2.77	-12.09	-.28
4	4	-5.73	3.93	1.96	-11.98	.53	-11.22	-2.47
Total	108	-4.06	4.07	.39	-4.84	-3.28	-16.79	-.03
Bilingual								
0	69	-4.60	4.08	.49	-5.58	-3.62	-16.67	-.25
2	19	-2.98	3.72	.85	-4.77	-1.19	-11.98	-.03
3	28	-4.34	5.28	.10	-6.39	-2.30	-17.18	-.15
4	9	-4.24	2.83	.94	-6.41	-2.06	-7.56	-.60
Total	125	-4.27	4.25	.38	-5.02	-3.52	-17.18	-.03

Note. <sup>1</sup>The difference score is the difference between the percentage of LEP migrant students that received special education services and the percentage of all LEP migrant students in the district.

TABLE 23. Correlations for the Question 6 Difference Scores<sup>1</sup> and District Characteristics

	Bilingual/ESL Enrollment	Total LEP Enrollment	Total Hispanic Enrollment	Total Economically Disadvantaged Enrollment	Special Ed Hispanic Enrollment
Difference Score	-.183* .041	-.185* .039	.263** .003	.240** .007	.308** .000

Note. \*\* Significant at the 0.01 level.

\* Significant at the 0.05 level.

<sup>1</sup>The difference score is the difference between the percentage of LEP migrant students that received special education services and the percentage of all LEP migrant students in the district.

education services. As these populations increased, respectively, the greater the difference scores. There was a significant negative correlation for the difference score and the bilingual population served in bilingual or ESL Programs and total LEP enrollment. For these characteristics the difference score increased as the populations decreased.

### *Summary*

During the 2000-2001 school year there were approximately 76,561 migrant students enrolled in public schools in the state of Texas. Approximately 95% of this population was Hispanic, 91% were economically disadvantaged, and 45% were LEP. Of the 76,561 migrant students, 12% ( $n = 9,520$ ) received special education services. Within the population that received special education services, 97% were eligible under the categories of SI, OHI, MR, LD, and ED.

Three difference scores were calculated for each of the 223 school districts in the present study and were utilized in the analyses of various district characteristics. These included type of community, geographic region, existence of a migrant program, Migrant and Bilingual overall PAS ratings, bilingual population served in bilingual or ESL programs, total LEP enrollment, total Hispanic enrollment, total economically disadvantaged enrollment, and the total enrollment of Hispanics that received special education services. Table 24 provides a summary of the descriptive statistics for each of the difference scores and types of community that had significant post-hoc tests. Descriptive statistics are provided in Table 25 for all of the difference scores and geographic regions that had significant post-hoc tests. For the descriptive statistics of the



TABLE 24. Descriptive Statistics for Questions 4, 5, and 6 Difference Scores and Type of Community

Type of Community by Difference Score	<i>N</i>	<i>M</i>	<i>SD</i>
Question 4 Difference Scores <sup>1</sup> (Includes All Migrant Students)			
<i>Major Urban</i>	8	.01	.17
<i>Major Suburban</i>	12	-.01	.54
<i>Other Central City</i>	19	.49	.98
Other Central City Suburban	23	2.12	3.21
<i>Independent Town</i>	19	.52	2.19
Non-Metro Fast Growing	7	1.49	1.14
<i>Non-Metro Stable</i>	73	1.51	3.62
Rural*	62	4.85	6.04
Question 5 Difference Scores <sup>2</sup> (Includes All Migrant Students)			
<i>Major Urban</i>	8	-1.21	3.62
<i>Major Suburban</i>	12	.45	3.60
<i>Other Central City</i>	19	.92	3.30
Other Central City Suburban	23	5.54	10.80
Independent Town	19	3.49	10.43
Non-Metro Fast Growing*	7	12.70	10.62
Non-Metro Stable	73	3.99	8.49
Rural	62	7.46	8.14
Question 6 Difference Scores <sup>3</sup> (Includes Migrant LEP Students)			
<i>Major Urban</i>	7	-.60	.71
<i>Major Suburban</i>	10	-1.10	1.21
<i>Other Central City</i>	16	-2.07	2.54
Other Central City Suburban	18	-4.92	3.58
<i>Independent Town</i>	12	-3.36	3.85
Non-Metro Fast Growing	3	-2.93	3.84
<i>Non-Metro Stable</i>	38	-4.66	4.24
Rural*	21	-8.15	4.63

Note. \*Denotes community that is statistically different from the other italicized communities.

<sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district.

<sup>2</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of all students who received special education services.

<sup>3</sup>The difference score is the difference in ratios between the percentage of LEP migrant students that received special education services and the percentage of all LEP migrant students in the district.

TABLE 25. Descriptive Statistics for Questions 5 and 6 Difference Scores and Educational Service Center (ESC)

Educational Service Center	<i>N</i>	<i>M</i>	<i>SD</i>
Question 5 Difference Scores <sup>1</sup> (Includes All Migrant Students)			
<i>Region 1</i>	32	3.37	3.98
Region 2	17	7.71	6.19
<i>Region 4</i>	7	.43	5.50
<i>Region 6</i>	3	-2.00	1.84
<i>Region 7</i>	2	-6.92	1.11
<i>Region 8</i>	12	2.51	7.60
Region 9	6	6.21	6.92
Region 10	4	3.09	8.01
<i>Region 11</i>	7	2.58	14.14
Region 12*	5	20.61	22.85
<i>Region 13</i>	16	3.54	10.57
Region 14	12	5.51	8.58
Region 15	8	4.88	5.36
<i>Region 16</i>	21	2.36	5.29
Region 17	28	6.53	8.95
Region 18	11	5.25	6.16
<i>Region 19</i>	9	.90	1.81
Region 20	22	6.64	10.57
Question 6 Difference Scores <sup>2</sup> (Includes LEP Migrant Students)			
Region 1	29	-5.75	4.33
<i>Region 2</i>	7	-1.10	1.19
<i>Region 4</i>	4	-.72	.56
Region 8	3	-9.12	6.47
Region 10	3	-.50	.48
Region 11	4	-1.96	2.78
<i>Region 13</i>	7	-1.43	.81
Region 15	2	-3.85	4.84
Region 16*	17	-8.02	4.72
Region 17	18	-3.91	3.85
Region 18	5	-3.33	4.88
Region 19	8	-3.62	2.53
<i>Region 20</i>	14	-2.42	3.03

Note. \*Denotes ESC that is statistically different from the other italicized ESC's.

<sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district.

<sup>2</sup>The difference score is the difference between the percentage of LEP migrant students that received special education services and the percentage of all LEP migrant students in the district.

difference scores and the existence of a migrant program, refer to Tables 11, 16, and 21. For the descriptive statistics of the difference scores and Migrant and Bilingual overall PAS ratings, refer to Tables 12, 17, and 22. Table 26 displays the correlations between the difference scores in Questions 4, 5, and 6 and the other district characteristics.

TABLE 26. Correlations Between the Difference Scores for Questions 4, 5, and 6 and District Characteristics

	Question 4 Difference Scores <sup>1</sup>	Question 5 Difference Scores <sup>2</sup>	Question 6 Difference Scores <sup>3</sup>
Bilingual/ESL Enrollment	-.106	-.153*	-.183*
	.116	.022	.041
Total LEP Enrollment	-.106	-.152*	-.185*
	.115	.023	.039
Total Hispanic Enrollment	-.136*	-.171*	.263**
	.042	.011	.003
Total Econom. Disadvantaged Enrollment	-.127	-.159*	.240**
	.058	.018	.007
Special Ed. Hispanic Enrollment	-.150*	-.162*	.308**
	.025	.015	.000

*Note.* \*\*Significant at the 0.01 level.

\*Significant at the 0.05 level.

<sup>1</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district.

<sup>2</sup>The difference score is the difference between the percentage of migrant students that received special education services and the percentage of all students, excluding migrant students, that received special education services.

<sup>3</sup>The difference score is the difference between the percentage of LEP migrant students that received special education services and the percentage of all LEP migrant students in the district.

## CHAPTER V

### SUMMARY, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

#### *Summary*

During the 2000-2001 school year, there were 4,021,641 students enrolled in 7,318 Texas public schools, not including charter schools. Within this population, 14% were African American, 41% were Hispanic, 49% were economically disadvantaged, 12% received special education services, and 13% were enrolled in Bilingual/ESL education. There were also approximately 76,561 migrant students enrolled in these same schools. Of these 76,561 migrant students, approximately 95% were Hispanic, 91% were economically disadvantaged, and 45% were LEP. Twelve percent ( $n = 9,520$ ) of the migrant student population across the state received special education services. This percentage was the same as for all students that received special education services.

Of the 9,520 migrant students that received special education services, 97% were eligible under the disability categories of SI, OHI, MR, LD, and ED. This percentage was similar to the percentage of all other students, excluding migrant students, that received special education services, with the majority of the students that received special education services being eligible under the five aforementioned disability categories. Further analyses demonstrated that within the five aforementioned disability categories, more migrant students qualified for services under the LD category (72%). This was significantly different from all students, excluding migrant students, that received special education services (56%). For SI, 16% of migrant students and 21% of all students, excluding migrant students were eligible. For OHI, there were 3% and 9%,

respectively. The disability category of ED had 4% and 8%, respectively. The percentage of students that were eligible under MR was about 6% for each group.

In the analyses of disproportionate representation of migrant students that received special education services, the methodology that was utilized was similar to the one used by TEA. A difference score was obtained by subtracting the percentage of migrant students in the district from the percentage of migrant students that received special education services. This analysis determined that of the 223 districts in our sample, there were districts at both ends of the spectrum, but more districts were found to have an overrepresentation of migrant students that received special education services. This way of looking at overrepresentation is termed the percentage of category or program by group (MacMillan & Reschly, 1998) and identifies what percent of children classified in a certain program belong to a specific group (i.e. migrant students). There were only 2 districts that had difference scores less than  $-5$ , which represents underrepresentation of 5% or more. There were 39 districts (17.5%) that had difference scores of 5 or greater, which represents overrepresentation of 5% or more. For these districts, the difference scores increased as total district enrollment decreased. Districts with a higher difference score had a higher total district enrollment. The difference scores were not correlated with total migrant student district enrollment for each district.

In using the same methodology when the additional risk factor of LEP was added to migrant status, the difference scores changed dramatically. These difference scores were obtained by subtracting the percentage of migrant LEP students in the district from the migrant LEP students that received special education services. Of the 125 districts in

this analysis, all of them had an underrepresentation of LEP migrant students that received special education services. There were 32 (25.6%) of the 125 districts that had difference scores less than  $-5$ , which represents an underrepresentation of migrant LEP students that received special education services of 5% or more. This finding means that being LEP is an additional risk factor of underidentification for migrant students. When migrant students were also LEP, they were less likely to receive special education services in these districts. For these districts, as the difference scores increased, the total district enrollment decreased. As the difference scores increased, total migrant student district enrollment decreased. Districts with higher difference scores tended to have a lower district enrollment of migrant students but a higher total district enrollment overall.

In comparing the percentage of migrant students that received special education services with the percentage of all students, excluding migrant students, that received special education services, the results indicated that many districts had a greater percentage of the migrant student population that received special education services. For example, one district could have 12% of all students, excluding migrant students, that received special education services and 40% of the migrant student population received special education services. In this example, the difference score would be 28. There were 44 (19.7%) districts of the 223 that had a difference score greater than 10, which means there was overrepresentation. In these districts, as the difference score increased, the migrant student district enrollment decreased. The districts with higher difference scores also had a decrease in total district enrollment. Thus, districts that had

a lower enrollment of migrant students evidenced higher difference scores. The same finding occurred for districts that had a lower total district enrollment. These characteristics did not necessarily occur simultaneously since analyses were run separately.

The analyses of the difference scores with the district characteristics produced varying results depending upon the difference score that was utilized for the comparison.

*Type of Community.* For the different type of community, all of the difference scores produced a significant ANOVA, but the post-hoc tests showed some varying results. For the difference scores in question 4 (the difference between the percentage of migrant students that received special education services and the percentage of migrant students in the district) and question 6 (the difference between the percentage of LEP migrant students that received special education services and the percentage of LEP migrant students in the district), communities that were Rural were statistically different from those that were Major Urban, Major Suburban, Other Central City, Independent Town, and Non-Metro Stable. Rural communities tended to have higher rates of overrepresentation of migrant students that received special education services overall, and higher rates of underrepresentation of LEP migrant students. For the difference scores in question 5, the post-hoc test determined that communities that were Non-Metro Fast Growing were statistically different from those that were Major Urban, Major Suburban, and Other Central City. Non-Metro Fast Growing communities had higher rates of overrepresentation of the percentage of migrant students that received special



education services when compared to the percentage of overall student population, excluding migrant students, that received special education services.

*Geographic Region.* For the geographic region, the ANOVA was significant for the difference score obtained in question 5 (the difference between the percentage of migrant students that received special education services and the percentage of all students, excluding migrants, that received special education services) and the difference scores obtained in question 6 (the difference between the percentage of LEP migrant students that received special education services and the percentage of LEP migrant students in the district). The post-hoc tests determined that for the difference scores obtained in question 5, Region 12 (Waco) was statistically different from Regions 1 (Edinburg), 4 (Houston), 6 (Huntsville), 7 (Kilgore), 8 (Mount Pleasant), 11 (Fort Worth), 13 (Austin), 16 (Amarillo), and 19 (El Paso). Region 12 (Waco) had a mean difference score of 20.61, which was almost 13 points higher than the rest of the regions and signifies overrepresentation of migrant students that received special education services when compared to all students, excluding migrant students, that received special education services. For the difference scores obtained in question 6, Region 16 (Amarillo) was statistically different from Regions 2 (Corpus Christi), 4 (Houston), 13 (Austin), and 20 (San Antonio). Region 16 (Amarillo) had a mean difference score of –8.02, signifying underrepresentation of LEP migrant students that received special education services.

*Existence of a Migrant Program.* For the analyses between the difference scores and whether or not the district had a federally funded migrant program, only the

difference scores obtained in question 5 and question 6 produced significant results. For these difference scores, districts with federally funded migrant programs had a smaller difference scores, which represents less overrepresentation of migrant students that received special education services, when compared to all migrant students, excluding migrant students, and less underrepresentation of LEP migrant students.

*Migrant and Bilingual Overall PAS Ratings.* In the analyses of Migrant and Bilingual overall PAS ratings with the difference scores in questions 4, 5, and 6, there was only one significant ANOVA. The ANOVA between the Bilingual PAS overall rating and the difference scores in question 4 was significant. The worse the overall Bilingual PAS score, the greater the difference score, signifying more overrepresentation between the percentage of migrant students in that district and the percentage of migrant students that received special education services.

*Other District Characteristics.* With respect to the other district characteristics in which correlations were done, the difference scores obtained in question 5 and 6 produced similar results. These difference scores were significantly correlated with the bilingual population served in bilingual or ESL programs, total LEP enrollment, total Hispanic enrollment, total economically disadvantaged enrollment, and the total enrollment of Hispanics that received special education services. For the difference score obtained in question 5, all of these correlations were positive meaning that the greater the difference score, the greater the population. For the difference score obtained in question 6, the analyses with bilingual population served in bilingual or ESL programs and total LEP population produced a negative correlation, while the analyses with total

Hispanic enrollment, total economically disadvantaged enrollment, and total enrollment of Hispanics that received special education services produced a positive correlation. As the bilingual population served in Bilingual or ESL Programs and the total LEP enrollment decreased, respectively, the greater the difference scores. The difference score was also greater when the total Hispanic enrollment, total economically disadvantaged enrollment and the total enrollment of Hispanics that received special education services increased, respectively.

### *Conclusions*

In previous literature, there was a concern that migrant students were underrepresented in special education (Baca & Harris, 1998; California State Department of Education, 1986; Coballes-Vega & Salend, 1998; ESCORT, 2001; Platt & Cranston-Gingras, 1991; Reynolds & Salend, 1990). This study determined that at the state level, 12% of migrant students received special education services during the 2000-2001 school year. This percentage was the same as that of all students that received special education services. In the past, when national data has been presented, there have been some problems with assuming that disproportionate representation in special education does not exist. The problem is that when state data is aggregated into national data, the realities of what is occurring at the state level are often obscured. This is the case with state data as well. At the state level, the percentage of migrant students that received special education services was the same as for all students, but the district level data showed otherwise. District level analyses demonstrated that there were issues of underrepresentation and overrepresentation in a number of districts across the state.

Overrepresentation was a greater issue when the percentage of migrant students that received special education services was compared to the percentage of migrants in the district. For a number of districts, they had a higher percentage of migrant students being served in special education when compared to the percentage of migrant students in the district. Overrepresentation was also an issue when the percentage of all students, excluding migrants, that received special education services was compared to the percentage of migrant students that received special education services. There were difference scores as great as 40, meaning that there were 40% more migrant students that received special education services when compared to all students, excluding migrants. Underrepresentation was a concern when migrant LEP students were identified. In all of the districts in our sample, migrant LEP students were underrepresented in special education. This was not consistent to previous research that identified an overrepresentation of LEP students in special education (Gersten & Woodward, 1994). This could have been the case because our sample not only examined LEP students, but the students were also migrant.

The examination in this study of migrant students that received special education services under five disability categories provided both consistencies and inconsistencies with the previous national research. In 1992, the U.S. Department of Education included migrant students in their analyses of disproportionate representation in special education. The current study was consistent in finding that there was a higher percentage of migrant students when compared to all students that were eligible under the LD category. The U.S. Department of Education (1992) research found that out of all of the migrant

students that received special education services, 64% of them were LD, compared to 44% for all students. The current study found that 72% of all migrant students that received special education services were LD, compared to 56% of all students. Under the category of SI the U.S. Department of Education (1992) reported that 26% of migrant students that received special education services fell under this category, while only 13% of all students that received special education services fell under this category. The current study determined that migrant students had a lower percentage (16%) when compared to all students (21%) under SI. In the categories of OHI and MR, the U.S. Department of Education (1992) reported a slight overrepresentation, while this study showed a slight underrepresentation in the disability category of OHI (3% compared to 9%) and about the same representation in the MR disability category. Although there are some differences with previous research and the research showed percentages nationwide, there is one major consistency. Migrant students continue to be overrepresented in the LD category. Because there were findings of disproportionate representation, it is important for this to be considered by TEA.

### *Limitations*

Several limitations were present in this study. The first is that this study provided information on migrant students at one particular moment in time in order to determine the representation of migrant students in special education. It is known that migrant enrollment can fluctuate dramatically in schools depending upon the time of year. Therefore, our study could have produced different results if the data would have been collected during a different time of the year, like the spring time.

A second limitation that existed was that the database used for the study was not the same database that the Texas Migrant Education Program (MEP) uses to keep track of migrant students. The MEP uses the New Generation System (NGS). Because NGS does not contain special education information, the data could not be extracted from this database. Efforts are being made to make sure these two databases are compatible with the migrant information, but there is a possibility that there are some discrepancies. Since this was a preliminary study, we used the database that the state uses for all other public school information, PEIMS. The 2000-2001 school year was the first time that the migrant code was utilized on PEIMS, so this can be another limitation because districts could have different people coding the students as migrant.

#### *Recommendations and Research Implications*

Several recommendations come about because of this preliminary research. When a student's disability is coupled with a migratory lifestyle, there are specific, unique needs that must be addressed in order for these students to receive a free and appropriate public education. Not providing migrant students with an appropriate education denies them of their rights under IDEA as students with disabilities. Recommendations are made that can be applied in both the practical and research arenas.

The first recommendation is in the area of eligibility for special education services and the diagnosis of a disability. It is recommended that professionals who make the diagnosis of a disability be trained appropriately on how to incorporate the exclusionary clause requirement in their decision making process. IDEA provides an exclusionary clause to be considered when diagnosing a child (Wright & Wright, 2002).

This exclusionary clause addresses the areas of limited English proficiency, cultural issues, and lack of an educational opportunity that should be taken into consideration when qualifying all students for special education services. It states that limited English proficiency, cultural issues, and lack of an educational opportunity should not be considered a disability. With migrant students, this clause is extremely important because most are LEP, Hispanic, and economically disadvantaged. There are many factors that were addressed in chapter II that make migrant students at-risk, including mobility, poverty, health issues, and cultural barriers. These issues in the lives of migrant students need to be considered before making a conclusion about a disability.

Determining if limited English proficiency, cultural issues, or lack of educational opportunity are the prime reason for a student's difficulties should not be easy. The difficulties that could be mirroring a disability may have been caused by limited English proficient, having a lack of educational opportunity, or as a result of factors associated with a migratory lifestyle. This recommendation is particularly important given that there was a higher percentage of migrant students identified as having a learning disability compared to all students, excluding migrants.

TEA already addresses the issue of disproportionality in special education as part of their DAS. They include Hispanics, African Americans, LEP students, and economically disadvantaged students in these analyses. TEA should consider the migrant population in their analysis of special populations and disproportionality since this study demonstrated that there were issues of both overrepresentation and underrepresentation with respect to receiving special education services. Again, there were a significant

number of migrant students that were eligible under the learning disability category, when compared to all students, excluding migrants. This may be a particular category that is included in the analyses.

Since NGS is used by MEP in Texas, it is recommended that this system should contain special education information. Migrant students face a great deal of difficulties when changing schools because they do not always have records on each student, so NGS is a good tool that can be used by many districts to access information on migrant students. If districts already have this system available, it should include pertinent information about migrant students that receive special education services. This would help so that migrant students who have already received special education services will not be reassessed or held up because they do not have their paperwork. They would be able to receive appropriate services upon their enrollment in a different school. Under *NCLB*, states are required to have a system in place to keep track of migrant student information electronically, and each state may include certain elements. These elements consist of “immunization records and other health information; elementary and secondary academic history (including partial credit), credit accrual, and results from State assessments required under section 1111(b) (of *NCLB*); other academic information essential to ensuring that migratory children achieve to high standards; and eligibility for services under the Individuals with Disabilities Education Act” (U.S. Department of Education, 2002). In the migrant database used prior to NGS, MSRTS, information on special education services had been included a short time before the entire system was shut down. Many problems with transferring records have been



documented, so having special education information on NGS could potentially benefit migrant students with disabilities a great deal.

It has also been documented that there seems to be a disconnect between personnel in migrant education, special education, and bilingual education (California State Department of Education, 1986). In order for migrant students with disabilities to receive appropriate services, there needs to be awareness of their needs so they can be referred and receive appropriate services. If personnel within these three areas are aware of the function of each program, there is a greater likelihood that they can work together to make their services available for those students that are eligible. For migrant students that have a bilingual education need and also need special education services, they can obtain services under all three programs in order to receive a greater benefit. The only way this will happen is if the personnel in each of these three programs communicate about the child's needs and work collaboratively for the child's benefit.

The factors affecting the education of migrant children over 65 years ago, before *ESEA* was passed, continue to be the same for children in the 21<sup>st</sup> century. Legislation has helped to improve the educational accomplishments of migrant children, but the fact is over 50% of migrant students still drop out of school. Perhaps things have not changed because migrant agricultural labor is something that will always be present and essential for our economy. People will always need someone to pick fruit and vegetables from the fields. Perhaps it is due to a way of life for immigrants who come to this country with no other options for work. Agricultural work can be considered one of the easiest types of jobs in which to gain employment.

The fact of the matter is that migrant children continue to be “invisible children” within our society. Many of our schools today are not aware of the special needs that migrant students bring to the classroom. Because they are not aware of this, they are also not prepared to deal with special needs present within the migrant student population. It is often the case that migrant children become someone else’s problem. Because they often change schools, school personnel in one district ignore the needs of migrant students and hope that someone else will take care of it. Ironically, many of the same factors once noted in the past continue to pose many difficulties for migrant children today, over 65 years later. Mobility, poverty, and health issues can have major psychological ramifications. It becomes very interesting how some of the migrant children are able to be successful in the educational systems. What is it that makes some migrant children resilient? How can we assure that more migrant students obtain equitable educational outcomes? How can we help improve migrant education? How can we have communication with other states so that children are tracked better? Empirical research needs to be conducted so these questions can be answered.

In addition to the applied recommendations, there are also several recommendations for research. Many studies have focused on the representation of Hispanics in special education, but few have focused on migrant students. More research on migrant students that receive special education services needs to be conducted in order to discover how to best serve these children. One area of future research is to conduct a replication of this study using data from the spring. Since the enrollment of

migrant students fluctuates, it would be interesting to discover how these results would be different during that period of time.

This research also needs to be replicated in other states across the U.S. in order to determine the generalizability of the results. It would be important especially in other states that have a high concentration of migrant students, such as California and Florida. There are some distinct characteristics in other states that could greatly impact the results of a replication study. Since the migrant student enrollment in other states can vary greatly from that of Texas with respect to demographic characteristics, data from other states may produce varying results. States use different formulas to determine disproportionate representation. This might vary the results as well. All states have different criteria to determine special education eligibility in certain disability categories, such as LD, so this could impact the results.

Another area of research would be an extension of the current study in that it would examine more closely and compare those districts in which there is no disproportionate representation of migrant students that receive special education services with those districts that have an under- or overrepresentation. What are districts doing to prevent an overrepresentation of this population? Is the district staff more knowledgeable about the issues that face migrant children? What kind of support is provided for migrant children and families? How well do migrant education, bilingual education, and special education programs work together? What is the graduation rate for migrant students with disabilities compared to all migrant students, the overall student population, and the special education population? This research could also

include an examination of current migrant student special education folders to study assessment practices and interventions that are effective with migrant children. What assessment practices were involved? What assessment instruments were utilized? Was the exclusionary clause incorporated into the decision making process with respect to eligibility? What are the characteristics of the migrant students within that district? What pre-referral strategies were utilized?

Tracking migrant students that receive special education services from district to district would be another interesting research study. This study could be similar to Pyecha and Ward's (1982) study on the implementation of *P.L. 94-142*. This study could examine what services the students are provided from district to district. Are services consistent or inconsistent? Are language issues considered in the Individualized Education Program (IEP)? If bilingual education services are provided, is there consistency from district to district? Does the receiving district obtain the student's special education file in a timely manner in order to provide appropriate services? How are migrant families involved in the special education process? Do migrant children and families feel supported? Are districts complying with conducting transfer meetings, annual meetings, and reevaluations in a timely manner? How is this different for students that change schools in more than one district within a year? This study could be conducted using regions with a high percentage of migrant students, such as Region I (Edinburg) in Texas.

Standardized assessment in Texas is a very important area in accountability. As a result, this is an open area for research, particularly with migrant students because of

their mobility issues. Are migrant students participating in these assessments? What happens if they move? What percentages of migrant students take the State Developed Alternative Assessment (SDAA)? How does this compare to all students? The new assessment, the TAKS, has a requirement for third graders to pass the reading portion in order to pass to the next grade (TEA, 2003a). This becomes a particularly interesting area for future research on migrant students. How is this policy affecting migrant students? If they are not enrolled in Texas schools during the time of the test, but are third graders, do they have to adhere to this same requirement? Do they have the same number of opportunities to pass the reading test as other students do? Will more migrant children be referred to special education if they do not pass the test?

The last recommendation is in reference to the formula that TEA uses to calculate disproportionate representation. TEA currently uses a variation of the composition index. As defined by the Committee on Minority in Special Education (2002), the composition index determines “the proportion of all children served under a given disability category who are members of a given racial/ethnic group” (p. 43). TEA calculates a difference score obtained by subtracting the special education ethnicity percentage (composition index) from the overall ethnicity percentage. A risk level is then assigned to each district. Although the use of a composition index is one way of determining disproportionate representation, other methods utilized, such as the risk index and odds ratio, provide additional valuable information. These other two methods provide information in order to compare the identification rates of minority students with that of White students. Our study produced varying results when we used TEA method

of calculation and when we used a variation of the risk index that is also defined by the Commission on Minority Representation in Special Education. When we used the composition index, we were able to obtain information on disproportionate representation taking into consideration the migrant student population in the district. When we used the risk index, we were not only able to consider the migrant student population, but we also had a comparative basis to all students in the district. This produced very different results. The difference scores had a larger range, with many that were twice as much as the composition indexes. Therefore, it is recommended that TEA also consider incorporating the risk index, as well as the odds ratio, in its analysis of disproportionate representation.

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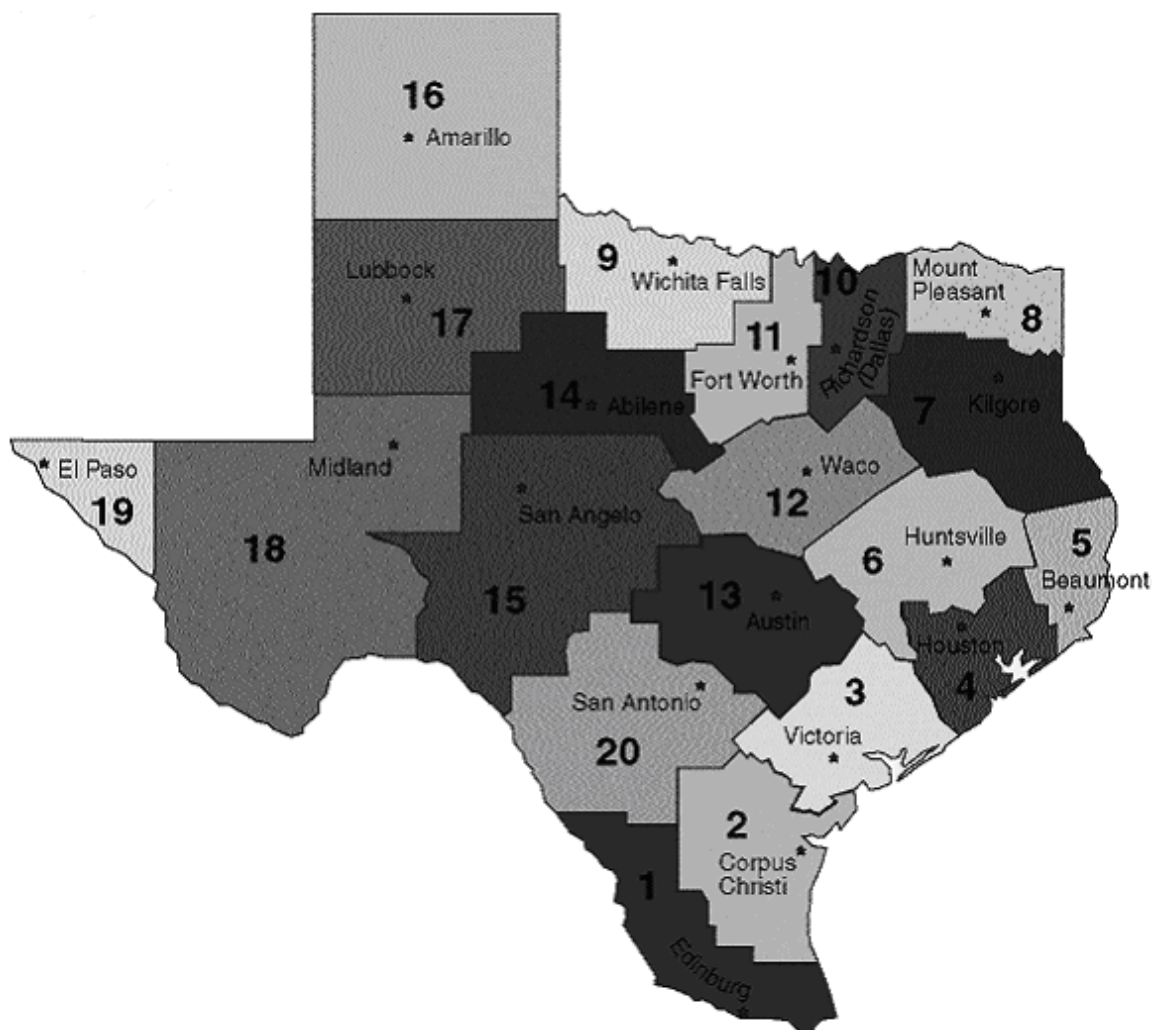
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## APPENDIX A

## GEOGRAPHIC REGIONS OF TEXAS



\*\*Obtained from Texas Education Agency (2002b)

## VITA

Nancy Peña Razo was born in Sanger, California, in October 1977 to Artemio Peña and Sanjuana Idalia Peña who were both originally from Los Aldamas, Nuevo León, Mexico. Since the Peña family was a migrant family, Nancy grew up calling both Parlier, California and McAllen, Texas her home. After graduating from Nikki Rowe High School in McAllen in May 1995, Nancy entered college at the University of Notre Dame in South Bend, Indiana, to then graduate in May 1999 with a B.A. in psychology. In August of that same year, she began her graduate work in school psychology at Texas A&M University. In August of the following year, she married her high school sweetheart Jesse. Nancy has taught with the migrant program in McAllen ISD, was a McNair Scholar at Notre Dame, and worked on various research teams while at Texas A&M. She worked for two years with the Office for Services for Students with Disabilities at Texas A&M University as an Accommodations Counselor and worked with College Station ISD as a bilingual assessor. Nancy then completed her internship at Lewisville ISD and will begin her post-doctoral training at Deer Oaks Mental Health Associates in McAllen after graduating in August 2004 with her Ph.D. in school psychology.

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